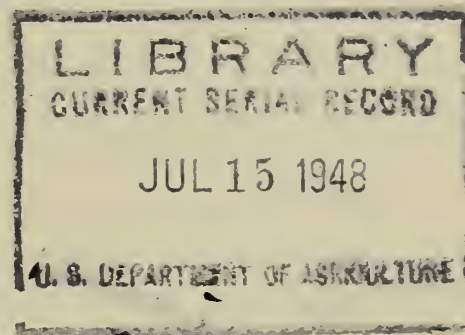


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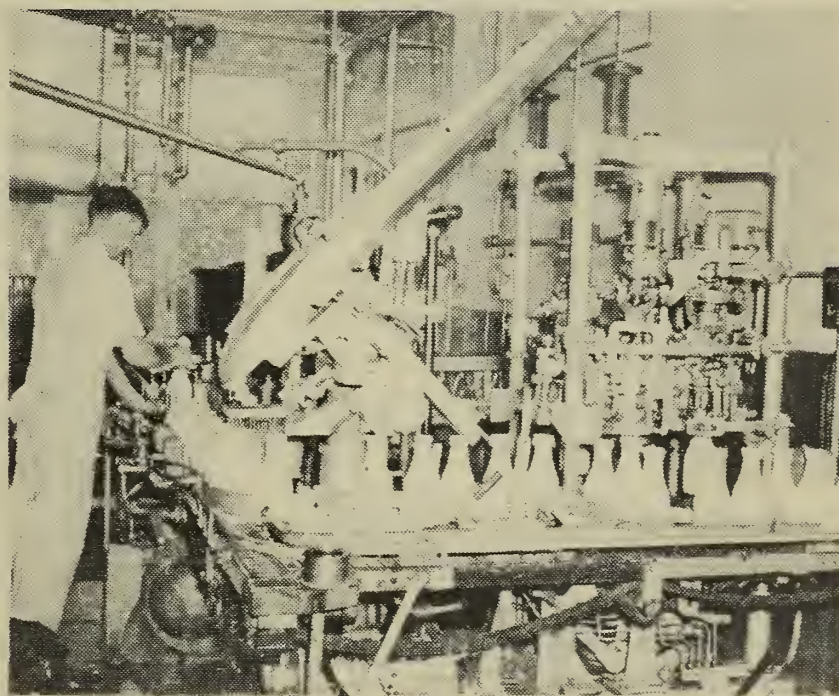
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Economic Analysis **of DAIRY COOPERATIVES** *in Georgia*



By DONALD E. HIRSCH



COOPERATIVE RESEARCH AND SERVICE DIVISION
FARM CREDIT ADMINISTRATION
U. S. DEPARTMENT OF AGRICULTURE, WASHINGTON, D. C.

MISCELLANEOUS REPORT 113

MARCH 1948

INV. '60

UNITED STATES DEPARTMENT OF AGRICULTURE
FARM CREDIT ADMINISTRATION
WASHINGTON 25, D. C.
I. W. OUGGAN, GOVERNOR

COOPERATIVE RESEARCH AND SERVICE DIVISION

HAROLD HEDGES, CHIEF

JOSEPH G. KNAPP, ASSOCIATE CHIEF

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The Cooperative Research and Service Division conducts research studies and service activities relating to problems of management, organization, policies, merchandising, sales, costs, competition, and membership arising in connection with the cooperative marketing of agricultural products and the cooperative purchase of farm supplies and services; publishes the results of such studies; confers and advises with officials of farmers' cooperative associations; and cooperates with educational agencies, cooperative associations, and others in the dissemination of information relating to cooperative principles and practices.

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SUMMARY

The quantity of milk delivered to plants and dealers in Georgia in 1946 was nearly three and one half times that delivered in 1936. During those 10 years milk production increased only 13 percent in the State. This shift in utilization of milk affected operations in existing milk plants and stimulated development of new plants. Some of the latter are owned and operated by farmers' cooperatives.

The volume of milk handled by cooperatives has increased considerably and in 1946 represented nearly one-fourth of that delivered as whole milk to plants and dealers in the State. This increase has occurred despite 11 dairy cooperatives discontinuing operations. Some of those associations were bargaining organizations, never actually handling milk for their members, and others converted into proprietary concerns even though they had not incurred financial losses.

Nine dairy cooperatives were operating plants in Georgia in April 1947. The oldest was incorporated in 1930. Five were organized since 1942. Seven other cooperatives, incorporated during the past several years, planned in early 1947 to operate dairy plants before the end of the year.

No two of the cooperatives active in April 1947 were exactly alike in either organization or operation. The five oldest were organized on a capital stock basis and the others as nonstock corporations.

Eight of the 9 cooperatives process and distribute bottled milk. The ninth receives milk and ships it in bulk to pasteurizing and bottling plants. The markets in which the associations sell their products vary considerably as to population, presence or absence of price regulation by State authorities, and in farm and plant sanitary inspection.

One cooperative sells at wholesale to vendors only with retail sales conducted through association-operated stores. Another distributing cooperative operates a number of retail stores. In common with the remaining six distributing associations, however, it also sells at wholesale and retail through routes.

Sharp seasonal fluctuations in plant receipts of milk create operational problems. Recognizing that maximum efficiency in the plants will not be achieved until milk production on farms has become more nearly uniform throughout the year, several cooperatives have given attention to reducing seasonal variations in production.

The relative importance of the several sources of capital has varied among the group. All, however, have relied heavily on capital contributions of producer-patrons. Most of the associations have adopted the revolving fund plan to finance operations and to ensure equitable treatment of patrons. All the associations operating plants during

April 1947 were in reasonably good financial condition. Some of the younger associations had not achieved a satisfactorily stable condition but apparently no insurmountable obstacles prevent such development.

The older and larger cooperatives appear to operate more efficiently than the younger associations. Differences in circumstances, however, prevent an exact appraisal of the relation of age and of volume to operating efficiency.

In general, the operating cooperatives have done an excellent job of complying with principles and practices characteristic of bona fide agricultural cooperatives. They have rendered valuable service to members at cost. Substantial savings have been realized from marketing milk. With but a single exception, every cooperative has allocated those savings on a patronage basis to its producer-patrons.

Over 80 percent of the milk received from producers by Georgia dairy cooperatives comes from members. The members have complete control of each cooperative. Democratic representation is safeguarded by the principle of one vote per member, irrespective of his capital contributions.

All but one of the dairy cooperatives serve non-member patrons. Without exception, all associations exercise selective control of membership and thereby preserve a reasonable degree of harmony and unity.

A few cooperators believe that producers who did not share in an association's financial burden and operating problems during the first few months of its existence should be excluded from membership when the association has demonstrated its efficiency. Such a belief can lead to dissolution of the cooperative and formation of a proprietary corporation that has no more to offer producers "on the outside" than any other non-cooperative organization. Apparently such a belief has been one of the reasons several Georgia cooperatives that were financially successful have reorganized into proprietary concerns.

Opportunities exist for the development of new dairy cooperatives in Georgia. Where an economic need exists, cooperatives can be of immense value to milk producers. Increased emphasis on cooperation among existing and proposed associations could lead to mutually beneficial results. Disposal of surplus milk during months of high milk production is a problem that might be effectively dealt with through concerted action.

Cooperative marketing of dairy products is firmly established in Georgia and further progress is anticipated. The cooperatives must face many organizational and operational problems but there is no reason to believe that solutions will not be found. Cooperatives having sound financial policies, adequate plant facilities, and alert merchandising programs should provide efficient market outlets for milk produced by cooperating farmers.

ECONOMIC ANALYSIS OF DAIRY COOPERATIVES IN GEORGIA

By

Donald E. Hirsch
Agricultural Economist

The last decade has been one of dynamic development for the dairy industry in the Southern States. In Georgia, production of milk increased proportionately less than in the nation as a whole but changes in marketing were far more significant than in most other States. Deliveries of milk to plants and dealers increased at almost triple the national rate. In 1946 almost three and one-half times as much milk was sold at wholesale from Georgia farms as in 1936.

As the number of potential consumers increased and incomes rose to higher levels, the market for bottled milk and cream expanded in Georgia. As a result, consumption of milk on farms decreased. The volume of bottled milk and cream retailed by producers remained about the same but became relatively less important each year as sales by corporate distributors increased. Wartime shortages in supplies of equipment and labor were factors affecting producer-distributor businesses. Stricter sanitary regulations, particularly those requiring pasteurization of milk to be sold for consumption in fluid form, also contributed to the decline in importance of distribution by individual producers.

Increased interest and activity in cooperative marketing accompanied these changes in the dairy industry of Georgia. In some instances, producer-distributors ceased to independently bottle and distribute milk produced on their farms and merged their distributing operations into cooperative enterprises. Other producers, who had previously sold milk at wholesale to proprietary plants, endeavored to increase their incomes by marketing their milk cooperatively.

Farmers' cooperatives in Georgia, like those in other sections, are an economic tool for self-help that the milk producer may use to increase efficiency in marketing milk produced on his farm. They act as a channel through which savings made in marketing milk are distributed to individual farmers. Thus cooperatives themselves have no income, but

NOTE: Acknowledgment is made of numerous suggestions, relative to the form and content of this report, received from Irwin R. Hedges, in charge, Dairy Section, Cooperative Research and Service Division. In addition, the author is indebted to C. G. Garner, Extension Economist, Georgia Extension service, and to all the managers of the dairy cooperatives in Georgia, without whose cooperation this report could not have been made.

the income of their members, as individual farmers, is increased as a result of their operations. In providing service at cost, cooperatives return to each producer-patron all amounts arising from the sale of his products that are over and above his fair share of his association's expenses.

In common with other States, Georgia has recognized the unique features of the cooperative form of organization by enacting special statutes under which farmers' cooperatives may be chartered. The first such statute in Georgia was the Cooperative Marketing Act of 1920. That Act is still on the statute books but the more comprehensive Act of 1921¹ has entirely superseded it insofar as dairy cooperatives are concerned. All existing dairy associations are incorporated under the 1921 act.

This analysis of the operations of dairy cooperatives in Georgia deals with cooperative marketing of dairy products in an area which heretofore has not been a field of inquiry for students of cooperation. Considerable interest in the establishment of milk marketing cooperatives exists in many areas of the South. This appraisal should provide information of use to farmers planning to form new organizations that are to perform functions similar to those of the dairy cooperatives in Georgia, and to those striving to increase the efficiency of existing cooperatives.

DEVELOPMENT OF THE COOPERATIVES

The first dairy cooperative in Georgia was organized at Acworth in 1914 to make butter. It went out of business the following year. During subsequent years a cheese-making association, a butter-making association that developed a large wholesale milk business, four milk distributing associations, and four price bargaining associations were organized but later went out of business.

In April 1947 there were 9 dairy cooperatives operating dairy plants in the State (table 1). All but one, the association at Eatonton, were engaged in milk distribution. The association at Eatonton operated a milk receiving station and sold milk in bulk form to distributors. There was no association in the State engaged in price bargaining activities or engaged primarily in production of manufactured dairy products.

The six youngest cooperatives were formed principally by producer-distributors who previously had independently bottled and distributed the milk produced on their farms. The three older associations were formed by producers who formerly had sold at wholesale to proprietary dealers.

In addition to the 9 associations operating plants during April 1947, there were seven other cooperatives that had received their charters at rather recent dates and expected to engage in milk distribution before the end of the year (table 1).

¹Code of Georgia, Annotated. Title 65, Marketing Associations; Chapter 65-2, nonprofit cooperative associations under Act of 1921.

Table 1. - Dairy cooperatives in Georgia, with dates of incorporation for those active, April 1947

		Date incorporated ¹
<i>A. <u>Active and operating plants</u></i>		
Athens.....1.	Athens Cooperative Creamery Company.....	(1) 1930 (2) 1941
Atlanta.....2.	Atlanta Dairies Cooperative.....	1943
Atlanta.....3.	Georgia Milk Producers Confederation.....	1931
Columbus.....4.	Wells Dairies Cooperative.....	1936
Dublin.....5.	Dublin Co-Operative Dairies, Inc.....	1944
Eatonton.....6.	Eatonton Cooperative Creamery, Inc.....	1932
Marietta.....7..	Cobb Co-operative Dairies.....	1944
Milledgeville..8.	Milledgeville Cooperative Dairies, Inc.....	1945
Thomaston.....9.	Upton Cooperative Dairies, Inc.....	1945
<i>B. <u>Active but not yet operating plants</u></i>		
Cedartown.....1.	Cedar Vally Cooperative Association, Inc....	1946
Douglasville...2.	Douglas County Cooperative Dairies, Inc....	1947
Eastman.....3..	Dodge Co-op Dairies, Inc.....	1947
Griffin.....4.	Spalding County Cooperative Dairy, Inc.....	1945
La Grange.....5.	Troup County Cooperative Dairy.....	1945
Newnan.....6.	Coweta Cooperative Dairies.....	1946
Quitman.....7.	Brooks-Thomas Co-op, Inc.....	1947
<i>C. <u>Inactive or extinct</u></i>		
Acworth.....1.	Acworth Creamery	
Americus.....2.	Americus Dairy Cooperative	
Augusta.....3.	Farmers Cooperative Creamery Association	
Cartersville...4.	Five Forks Cooperative Cheese Company	
Columbus.....5.	Pure Milk League	
La Grange.....6.	La Grange Sanitary League	
Savannah.....7.	The Better Milk Cooperative League	
Savannah.....8.	Starland Dairies Cooperative	
Valdosta.....9.	Farmers Cooperative Milk Producers Association	
Washington....10.	Wilkes County Cooperative Creamery Association	
Waycross.....11.	Square Deal Milk League	

¹Title 65 of the Code of Georgia, Annotated, relates to marketing associations. Chapter 1 contains provisions of the Act of 1920 and Chapter 2 those of the Act of 1921. All 16 active cooperatives are now incorporated under Chapter 2 but the association at Athens was first incorporated under Chapter 1.



This cooperative was organized by producer-distributors in 1944 to meet an acute local need for increased milk supplies.

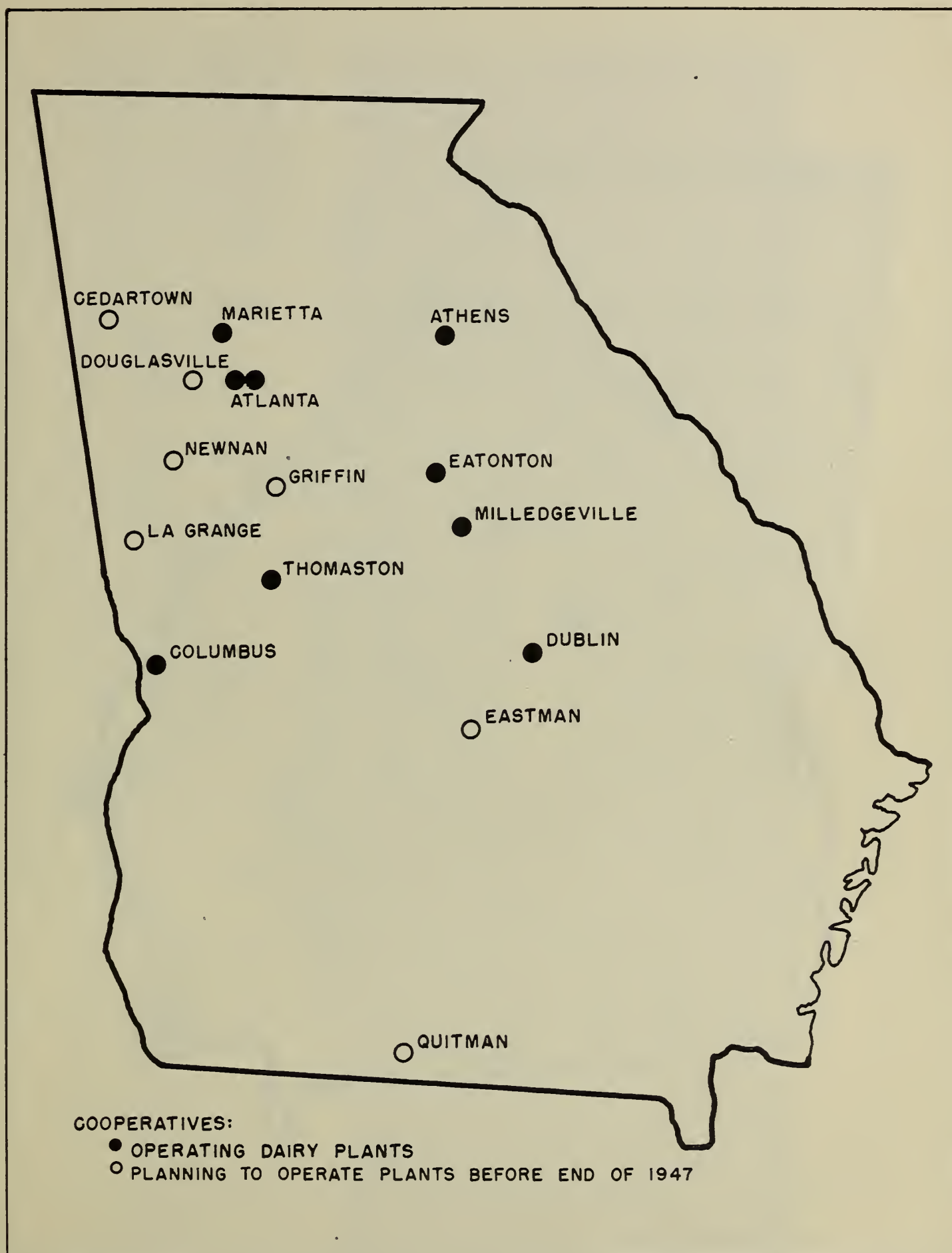
Most of the 16 active dairy cooperatives were in the northern half of the State (fig. 1). This geographic distribution followed closely the pattern of milk production in the State (fig. 2).

It is not surprising that cooperative marketing by Georgia dairymen is confined almost entirely to the distribution of market milk. The State, a deficit dairy production area during most the year, offers more attractive opportunities for market milk than for other dairy products. That such a condition has existed for a number of years is indicated by the shifts that have occurred in utilization of Georgia milk (fig. 3).

Milk bargaining associations represented a stage in the development of cooperative marketing of dairy products in Georgia and were preliminary to, rather than a part of, the organization of full fledged cooperative businesses. None of them ever operated a dairy plant.

Only three of the 11 inactive cooperatives were actual business failures. These were the associations at Acworth, Augusta, and Cartersville. Only one, the Augusta association, was incorporated under the cooperative laws of Georgia. Of the other four inactive or extinct cooperatives which formerly had plant facilities, three were reorganized into proprietary concerns, and the fourth was dissolved and the entire business sold to a former member of the cooperative.

During the twelve years 1936-47, the number of dairy cooperatives active in Georgia increased sharply as the number of new associations consistently exceeded the number becoming inactive during each of the four three-year periods (fig. 4). Accompanying this increase in number of



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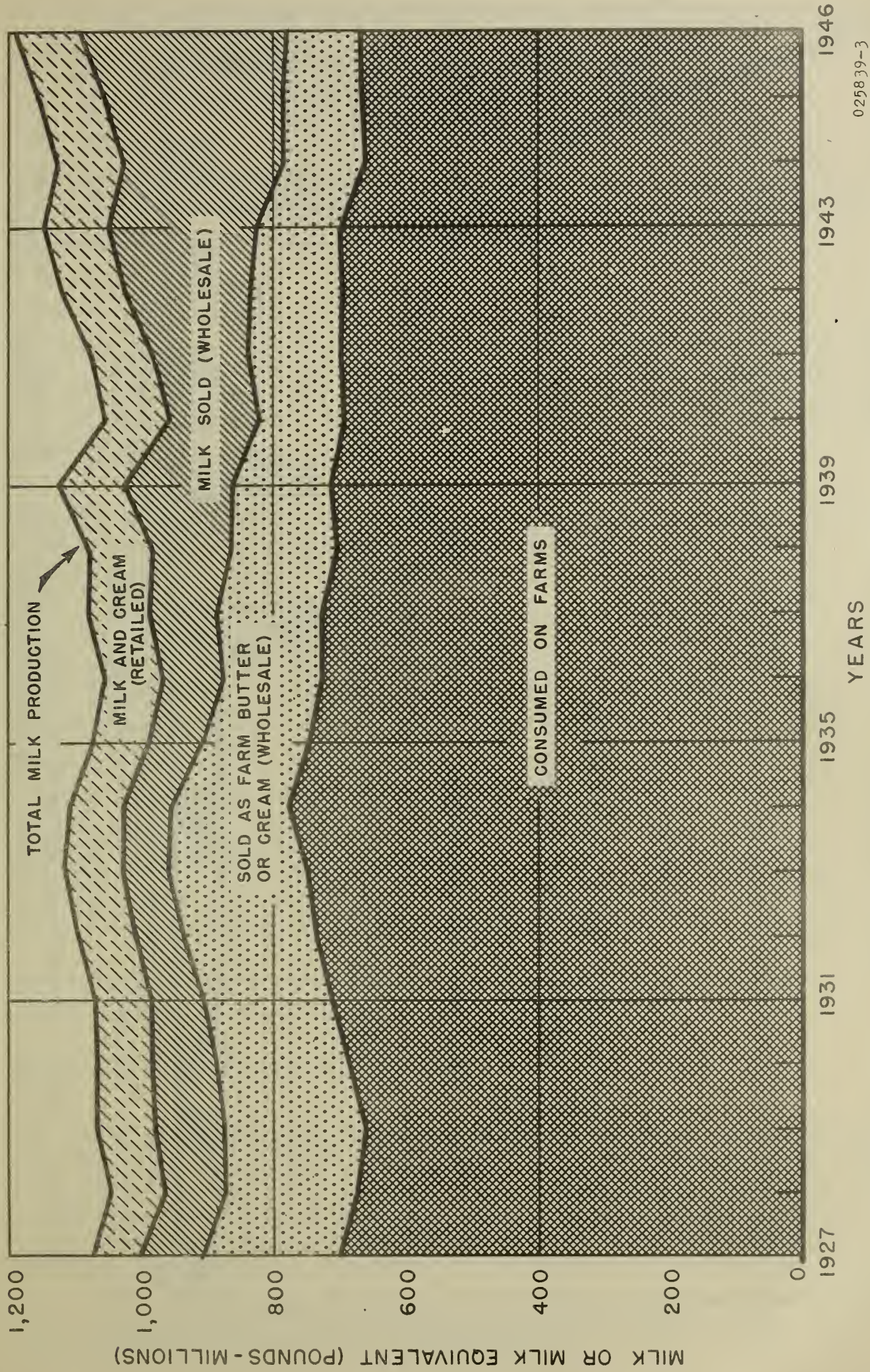
FIGURE 1: DAIRY COOPERATIVES IN GEORGIA, APRIL 1947



BASED ON DATA FROM BUREAU OF CENSUS, U.S. DEPARTMENT OF COMMERCE

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FIGURE 2: MILK PRODUCTION IN GEORGIA, 1944



BASED ON DATA FROM BUREAU OF AGRICULTURAL ECONOMICS, U.S. DEPARTMENT OF AGRICULTURE

FIGURE 3: PRODUCTION AND UTILIZATION OF MILK PRODUCED ON FARMS, GEORGIA, 1927-46

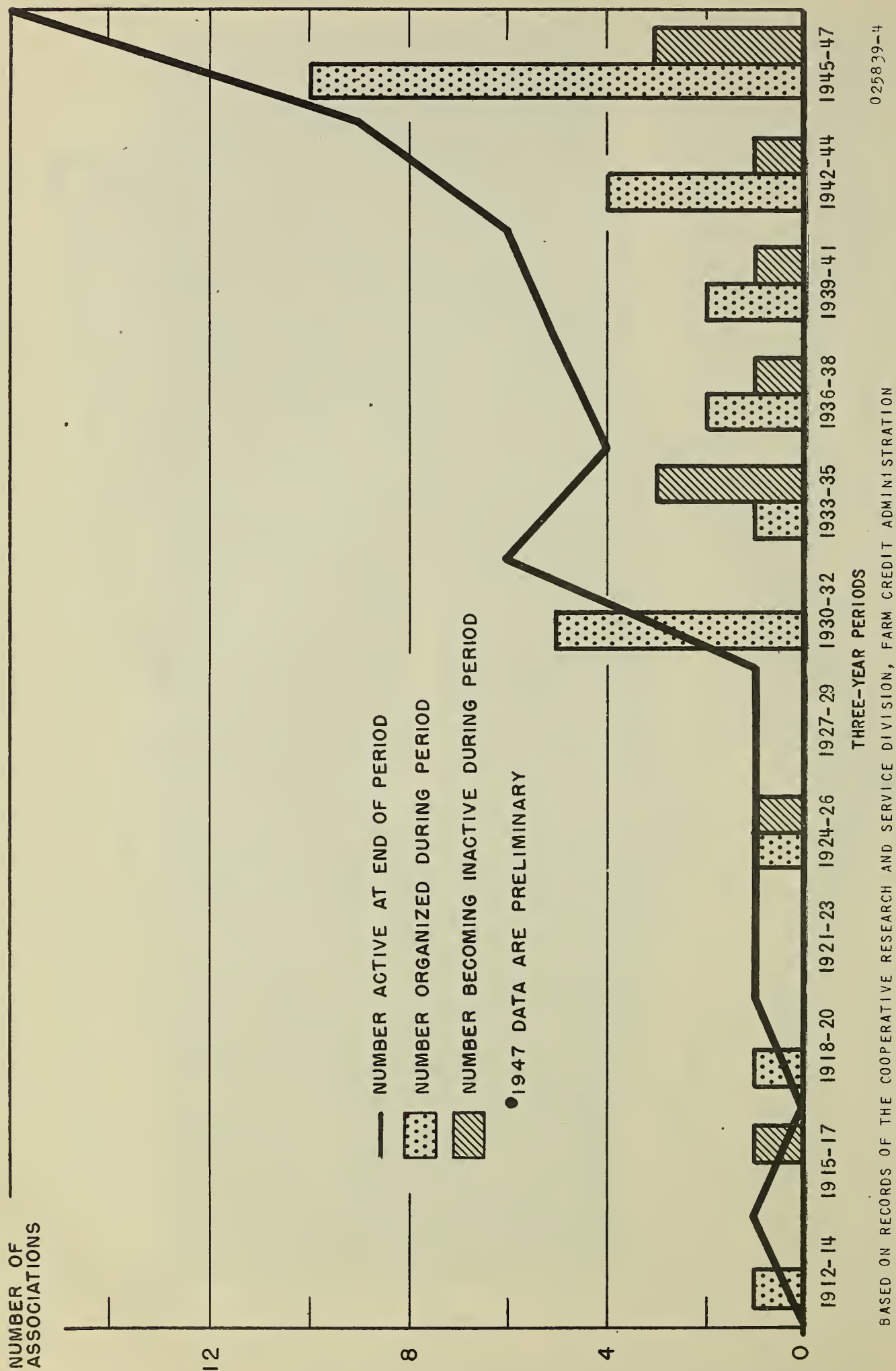


FIGURE 4: NUMBER OF DAIRY COOPERATIVES ORGANIZED IN GEORGIA AND NUMBER BECOMING INACTIVE DURING THREE-YEAR PERIODS, AND NUMBER ACTIVE AT END OF PERIODS, 1912-47●

cooperatives was an increase in volume of milk handled (fig. 5). In 1946 the cooperatives marketed about one-seventh of the milk sold from farms and nearly one-fourth of that delivered as whole milk to plants and dealers in the State.

OPERATION OF THE COOPERATIVES

This section deals with only the nine dairy cooperative operating plants in April 1947. Descriptions of their activities and characteristics are based upon practices and conditions existing at that time.

ORGANIZATIONAL FEATURES

The five oldest cooperatives are of the stock type. Some of the similarities and differences in their capital structure are summarized in table 2. Two associations pay 8 percent interest on their capital stock outstanding, the maximum rate permitted by law. This rate is somewhat higher than is usually paid by cooperative organizations.

Table 2. - Comparison of certain capital features of dairy cooperatives with capital stock operating plants in Georgia, April 1947

ITEM	ASSOCIATION NUMBER ^a				
	1	2	3	4	5
Par value of preferred stock.....	\$100	\$50	\$100	None	None
Par value of common stock.....	\$10	\$50	\$100	\$100	\$10
Interest rates on stock:					
Maximum limit on preferred.....	8%	7%	8%	-	-
Paid on preferred ^b	4%	5%	8%	-	-
Maximum limit on common.....	8%	8%	8%	8%	8%
Paid on common ^b	4%	5%	6%	0%	8%

^aNumbers in this table do not refer to the same associations as do the numbers in other tables in this report.

^bEnd of association's last fiscal year.

Source: Based on records of the cooperatives.

According to the Georgia cooperative marketing law,² no stockholder may own more than 20 percent of the common stock of a cooperative. However, an association may limit, in its organization forms, the amount held by a member to less than 20 percent. Only one dairy cooperative has such a limit. In that instance the member may not hold more than 50 shares, which is equivalent to less than 2 percent of the stock outstanding.

²Code of Georgia, Annotated. Title 65, Marketing Associations, Chapter 65-2, nonprofit cooperative associations under Act of 1921, paragraph 206.

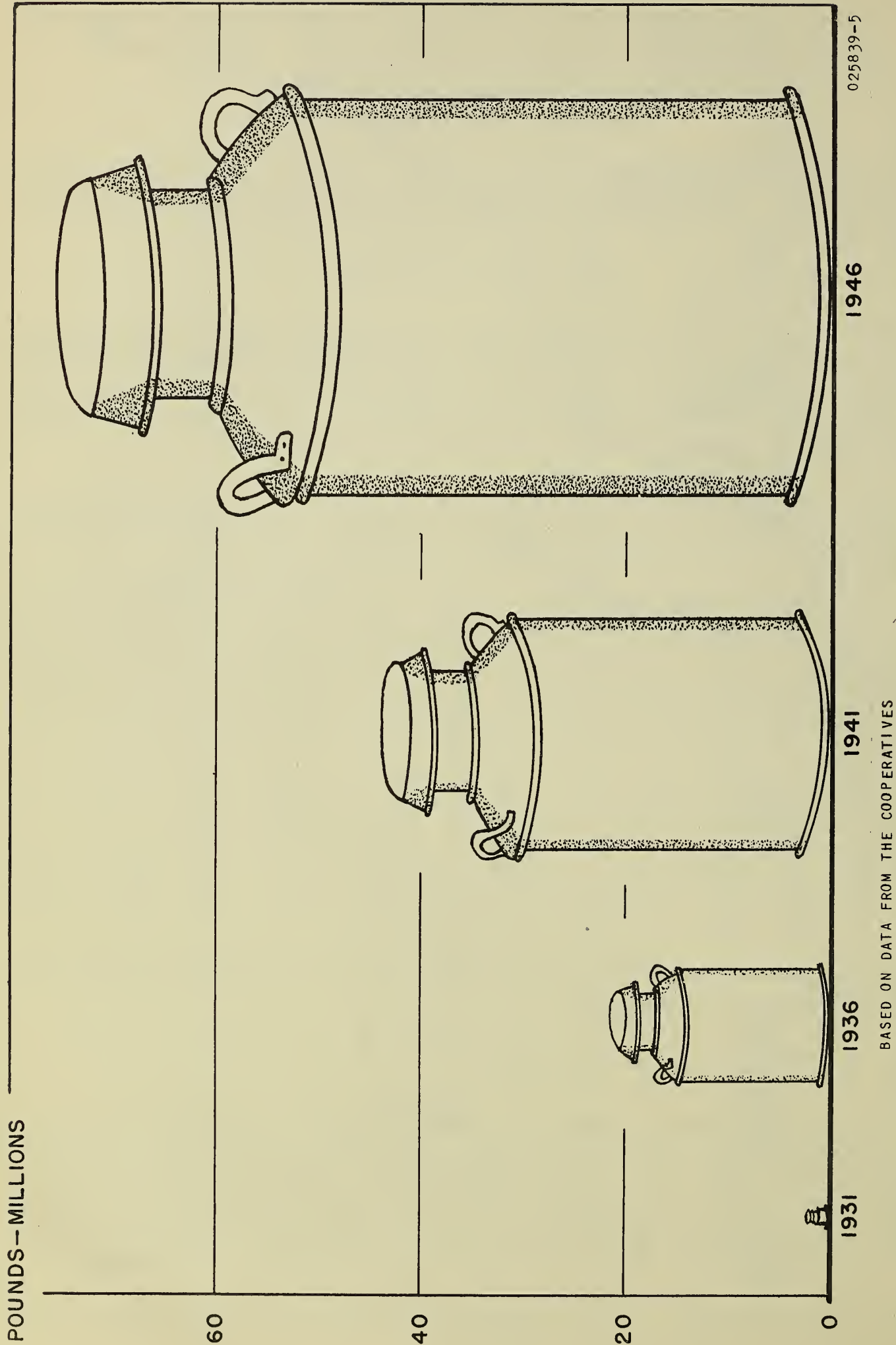


FIGURE 5: VOLUME OF MILK HANDLED IN PLANTS OPERATED BY FARMERS' COOPERATIVES IN GEORGIA, FIVE YEAR INTERVALS, 1931-46

Only two of the stock associations have paid dividends in the form of stock and one of those discontinued the practice several years ago.

The four youngest dairy cooperatives are of the nonstock type. Three have membership fees of \$100 and the fee of the other is \$10. All four have adopted a revolving capital plan of financing and use revolving fund certificates. A discussion of the operation of that plan is presented later in this report.

The shift toward the nonstock form of organization is a result of recognition of its suitability for cooperative enterprise. Either the stock or nonstock forms may be used satisfactorily but the nonstock form emphasizes the differences between the cooperative and proprietary types of business and may make it easier to keep an organization operating for the benefit of members as patrons rather than as investors.

Each dairy cooperative in Georgia adheres to the principle of limiting a member to one vote. In associations of these types and sizes, the one-man one-vote principle can hardly be challenged. It keeps control of the association on a democratic basis and minimizes differences in capital investments and patronage as factors affecting control.

Four cooperatives permit voting by proxy and two provide for voting by mail. Voting by proxy is characteristic of proprietary forms of enterprise and is not generally considered a desirable practice for cooperatives. All four associations that permit the practice are of the stock type.

The Georgia law³ states that only persons engaged in the production of the agricultural products handled by a cooperative, or associations composed solely of such persons, may be admitted to membership by a cooperative. Lessees and tenants, and lessors and landlords, may be included if they share in a product handled by the association. Only one of the dairy cooperatives limits its business to members. The others have nonmember business. In several associations a large proportion of the total producer business is done with nonmembers but in no instance does it equal or exceed that done with members.

The law requires⁴ that an amendment to a charter must first be approved by two-thirds of the directors and then adopted by a vote of a majority of the members attending a meeting of which notice of the proposed amendment has been given and at which a quorum is present. Thus, to effect needed changes in the charter, as well as to conduct other business, the definition of "quorum" becomes important.

³See paragraph 205 of reference cited in footnote 2.

⁴See paragraph 204 of reference cited in footnote 2.

Major differences exist in the dairy cooperatives' bylaws in requirements for determining quorums at meetings of the membership. The minimum requirements of three associations are a simple majority of the membership. Two associations require at least 60 percent, two at least 20 percent, one at least 70 percent, and one at least 10 percent of the total number of its members. The last mentioned cooperative requires that at least two-thirds of those voting must approve a proposed amendment to the charter before it can be adopted.

The cooperatives requiring only a small proportion of the total membership for a quorum are, with one exception, those having large memberships. The three associations requiring 60 percent or more of their members to be present to establish a quorum are among the smaller cooperatives in terms of membership.

SOURCES OF CAPITAL

The original members of five cooperatives subscribed capital according to mutual agreement but with no definite relation to volume. A sixth association established a minimum of \$500 and a maximum of \$2,000 for a member, the amounts varying according to the quantity of milk to be delivered daily. Capital for another association was subscribed at the flat rate of \$20 per gallon of milk to be delivered daily. Another cooperative had an agreement for subscription at the rate of \$10 per mature cow in the milking herd at the time of subscription; the minimum amount acceptable was \$100, however. Capital for the ninth association was subscribed at a flat rate of \$25 per mature cow. In that instance, however, credit was given for the value of the equipment and routes turned in to the cooperative by the merging producer-distributors.

In general, members that joined after the cooperative became established have been required to subscribe less capital than the original members. One reason for this has been the fact that in smaller cities most of the producers having large volumes of milk were original members and accepted disproportionately great financial responsibilities. Several of the associations, however, have made no substantial change in their requirements. Two cooperatives require new members to subscribe more capital than the original members.

Most of the cooperatives have required the subscriptions to be paid in cash or within one year. Others adopted the policy of making deductions from milk checks until the subscribed amount was paid.

Each association has had both short-term and long-term loans from individuals or organizations not affiliated with the cooperative. Eight of the nine have borrowed from the Columbia Bank for Cooperatives. Four of those, as well as the ninth association, have borrowed money from local banks. Several cooperatives have received loans from equipment companies to finance purchases of major items of equipment.

To meet current and anticipated capital needs, seven cooperatives make retains or deductions each delivery period from the amounts due producers for their product. These retains vary as follows: One association deducts one cent per pound butterfat; one, one cent per gallon; one, 30 cents per hundredweight; three, 35 cents per hundredweight; and one, 50 cents per hundredweight of milk.

Making retains to provide for capital needs closely identifies current capital contributions with patronage and is generally considered a sound cooperative practice. Since there are limits to the capital needs of an association, provision should be made for returning the oldest capital contributions outstanding when capital funds reach the point where it is no longer desirable to increase them. This is done by using current retains to retire earlier capital contributions. The capital of the cooperative is thus "revolved" over a given period, usually ranging from five to ten years. Such a plan usually is referred to as the revolving fund method of financing. It is perhaps the most equitable method by which a cooperative can provide for current capital contributions in direct relation to patronage and at the same time provide for the ultimate return of these contributions to the patrons who supplied them.

Six of the 9 dairy cooperatives in Georgia have incorporated the revolving fund plan into their organization papers. Two others have followed it in practice to the extent of retiring oldest investments first. The 6 cooperatives which have formally adopted the basic plan use revolving-fund certificates. Included are the 4 nonstock cooperatives and 2 of the stock cooperatives. Each of the latter also has common stock certificates, and one has preferred stock as well. One association specifies that its revolving-fund certificates may be issued only in minimum amounts of \$10; the others do not have a similar limitation. None of the associations has a due date on its certificates. A due date clause specifies that the cooperative must pay the owner of the certificate its face value on a given date. This makes the plan considerably less flexible and is to be avoided if possible.

Three of the cooperatives using revolving-fund certificates limit the rate of interest on these certificates to 4 percent. The other three limit it to 6 percent. None of the certificates bear on their face a provision to guarantee payment of interest to patrons each year.

The board of directors of each cooperative establishes the limits of capital reserves for the association. Two associations also have provisions in their bylaws limiting reserves. Reserves of 8 of the 9 cooperatives are allocated to producers on a patronage basis.⁵

⁵Does not include reserves for depreciation as amounts allocated to such reserves are considered a part of a cooperative's current operating expenses.

MARKETS SERVED

The cooperative that receives but does not process milk handles about three-fourths of the milk sold at wholesale from farms in the territory it serves. It is, therefore, the most important single outlet in that area. The milk is sold by the association in several of the larger cities in the State. On no market do its sales represent a major portion of the milk coming onto that market. It is important to each, however, in that it supplements production in areas immediately adjacent to the market.

Of the eight cooperatives distributing bottled milk, three serve market areas containing approximately 10,000 persons each. Two associations serve the nearly one-half million persons in Atlanta. The other three distributing cooperatives serve markets having between 20,000 and 100,000 persons. In the markets served by the eight associations, per capita consumption of milk, including milk utilized in ice cream and other products as well as that bottled as milk or cream, is reported to vary considerably.⁶ It ranges from about one-half pint a day in Milledgeville to nearly a pint a day in Athens. The average is about three-fourths of a pint a day.

Competition in the local markets also varies considerably for the eight distributing cooperatives. The number of competitors tends to increase with the size of the market but other factors are almost equally important in determining the number of competitors (table 3).

⁶Based on estimates of managers of the cooperatives supplying the markets.

Table 3. - Number and kind of competitors of dairy cooperatives distributing milk in Georgia, April 1947

ASSOCIATION NUMBER ^a	FLUID MILK COMPETITORS ^b			RELATIVE SIZE OF MARKET ^d
	CORPORATIONS ^c	PRODUCER- DISTRIBUTORS	TOTAL	
1.....	1	2	3	4
2.....	0	3	3	5
3.....	0	7	7	7
4.....	1	9	10	2
5.....	1	11	12	6
6.....	3	24	27	3
7.....	11	156	167	1
8.....	11	156	167	1

^aNumbers in this table do not refer to the same associations as do the numbers in other tables in this report.

^bExcludes ice cream manufacturers and others not handling bottled milk.

^cAll the corporations are proprietary except that for associations numbered 7 and 8, each is one of the competitors of the other.

^dNumber 1 indicates largest market in terms of population; other numbers related to population accordingly.

Source: Based on reports from the cooperatives and data from Georgia Milk Control Board.

Four of the cooperatives engaged in milk distribution operate in markets regulated by the Georgia Milk Control Board. The Georgia milk control act became effective March 30, 1937. The act provides for setting of minimum prices at various marketing levels in milksheds in which the Milk Control Board believes such action is necessary.

Section 21 of the act states:⁷

This Act shall not be construed to affect in any manner the relations between any cooperative marketing association organized pursuant to the laws of Georgia or of the United States, and its members or producers selling to it; provided that any such association shall itself comply with the provisions hereof as a producer with respect to milk sold to producer-distributors or distributors and as a distributor with respect to milk sold to others.

By establishing minimum prices at both producer and resale levels, the State milk control regulations tend to eliminate price competition, particularly at the wholesale and retail levels, in the markets to which they apply. However, the margins thus established assure efficiently operated cooperatives ample opportunity to effect savings for their producer-patrons.

⁷Milk control act of the State of Georgia, and acts amendatory thereof. 24 pp., see page 14. 1945.



Wells Dairies is the largest milk distributing cooperative in Georgia.

The distributing cooperatives are of major importance on some Georgia markets but of only minor importance on others. Two associations supply 90 percent of the market milk required by their respective markets. In contrast, a cooperative in one of the largest cities supplies only about 4 percent of that market's requirements. The average proportion of total market receipts of milk handled by the eight distributing cooperatives is about 50 percent. No particular relationship appears to exist between size of market or age of association and the proportion handled by cooperatives.

The producer price, and the dealers' margins as well, tend to be higher in the larger milk markets under regulation by the Georgia Milk Control Board (table 4). This is a normal relationship. In general, the larger the city the greater the difficulties incurred in obtaining an adequate supply of satisfactory milk. This results in higher costs for the raw products. Furthermore, plant and distribution costs per unit of product handled may be higher in the larger cities. Other factors play a part in establishing the regulated prices, however, and for that reason price levels do not correlate perfectly with population numbers in the Georgia markets.

There are no differentials between the store price of milk and the price for milk delivered to homes in Georgia. The absence of a price differential tends to make store sales particularly profitable but, at the same time, it removes an incentive for consumers to buy at stores and thereby forego the convenience of home delivery. In all the larger cities, where normally a differential would be most likely to develop, the prices are regulated by the Milk Control Board and no differential is permitted in the minimum prices established for store and home delivered sales.

Paper containers have been used to an increasing extent in many markets. Relatively little milk is sold in such containers in Georgia and none of it by cooperatives. Acting on the assumption that it costs more to prepare and distribute milk in paper containers than in glass bottles, the Milk Control Board requires milk sold in quart paper containers to be sold for 1 cent more than the minimum price per quart in bottles. This is partially counteracted by the fact that customers must make a bottle deposit of at least three cents for each quart glass bottle. However, comparative price relationships do not encourage widespread use of disposable containers.

METHODS OF PAYING PRODUCERS

The determination of producer prices is inseparably related to the problems of financing a cooperative engaged in milk distribution. Each of five Georgia dairy cooperatives pays producers the going competitive price for milk delivered during each pool period. The other four associations pay the prices established for their markets by the Milk Control Board. All nine cooperatives make final settlements at the end of their

Table 4. - Price paid producer, dealers' margins, and price paid by consumer for bottled milk in 21 Georgia markets, April 1947

MARKET	PRICE PAID PRODUCER ^a	MARGIN			PRICE TO CONSUMER AT STORE OR DELIVERED TO HOME
		PROCESSOR ^b	RETAILER ^c	TOTAL ^d	
<i>Georgia</i>		<i>Cents per quart</i>			
Atlanta ^{e f}	13.0	6.5	2.5	9.0	22
Augusta ^e	13.0	6.5	2.5	9.0	22
Columbus ^{e f}	13.0	6.5	2.5	9.0	22
Marietta ^{e f}	13.0	6.5	2.5	9.0	22
Athens ^f	11.2	6.8	2.0	8.8	20
Milledgeville ^f ...	11.6	6.4	2.0	8.4	20
Brunswick ^e	12.9	6.1	2.0	8.1	21
Savannah ^e	12.9	6.1	2.0	8.1	21
Cairo ^e	12.0	6.0	2.0	8.0	20
Dalton ^e	12.0	5.0	3.0	8.0	20
Dublin ^f	12.0	6.0	2.0	8.0	20
Fort Valley ^e	12.0	6.0	2.0	8.0	20
Gainesville ^e	12.0	6.0	2.0	8.0	20
Griffin ^e	12.0	6.0	2.0	8.0	20
Macon ^e	12.0	6.0	2.0	8.0	20
Moultrie ^e	12.0	6.0	2.0	8.0	20
Thomaston ^{e f}	12.0	6.0	2.0	8.0	20
Thomasville ^e	12.0	6.0	2.0	8.0	20
Tifton ^e	12.0	6.0	2.0	8.0	20
Valdosta ^e	12.0	6.0	2.0	8.0	20
Waycross ^e	12.0	6.0	2.0	8.0	20

^aBuying price for milk used in fluid form for city distribution; computed on per quart basis from price paid by dealers per hundredweight of milk of fat test most commonly sold by dealers.

^bDifference between wholesale price per bottled quart, and price per quart paid producers: The margin to cover processing costs and the costs of sales at wholesale.

^cDifference between price per single quart, bottled, at stores or delivered to homes, and at wholesale: The margin to compensate for costs of sales at retail.

^dDifference between price per single quart, bottled, sold at stores or delivered to homes, and price per quart paid producers: The margin to cover all costs from the time the milk arrives at the plants until it is in the hands of the ultimate consumers.

^ePrices regulated by the State Milk Control Board.

^fServed by one or more milk distributing cooperatives.

Source of basic data: Markets in which prices are regulated by the Milk Control Board - market orders issued by the Board for the milk sheds indicated. Markets not under price regulation - unpublished reports from the cooperatives distributing milk in those markets.

fiscal years. The current payment is called an "advance payment" and the final settlement is termed the "patronage refund." The patronage refund is the final payment of the total amount the patron is entitled to receive for milk marketed through the cooperative.

The patronage refund is the medium used for allocating to producers their individual shares of the savings resulting from the joint enterprise. Savings are credited to patrons' accounts on a patronage basis (whether they be paid subsequently in cash, certificates, or carried as book credits) by all the Georgia cooperatives except that one association excludes nonmembers from such distribution of savings. Five cooperatives make these allocations on the basis of pounds of milk received, two make them on gallons of milk, and two on pounds of butterfat received.

In most of the Georgia dairy cooperatives all patronage refunds not paid out in cash, shortly after the close of the fiscal year in which the savings occurred, are incorporated into the revolving fund plans already described.

Six of the cooperatives make advance payments to producer-patrons by determining a base price for milk testing 4.0 percent butterfat and adding or deducting 5 cents for each one-tenth of 1 percent variation in butterfat content from the base 4.0 percent. Two associations pay, on a straight butterfat basis, a uniform amount per pound of butterfat delivered during the period. The other cooperative makes no allowance whatsoever for butterfat content and considers only the weight of the milk delivered.

Methods have been devised for payment for all the milk solids in milk delivered by producers to dairy plants.⁸ The method of using a base price for milk of a certain test, with a price differential for variations in butterfat content, is less complex, however, and reasonably satisfactory for small distributing cooperatives. Paying on a straight butterfat basis gives undue importance to a single milk solid and overpays producers of milk with high fat content at the expense of producers of milk with a low fat content. This is due to the fact that the solids-not fat content of milk does not vary in direct proportion to changes in butterfat content. One of the two cooperatives using this method attempts to offset that shortcoming by making final patronage allocations on the basis of the number of gallons of milk received.

Payment for milk on the basis of weight alone has been discontinued by nearly all cooperatives in all areas because it gives no recognition to either the fat or solids-not-fat content of the milk. It is the milk solids that have value, not the water in milk.

⁸See Froker, R. K. and Hardin, C. M. Paying Producers for Fat and Solids-Not-Fat in Milk. Res. Bul. 143, Agr. Exp. Sta. and Agr. Ext. Serv., University of Wisconsin, Madison, Wis. 48 pp. Revised, Dec. 1942.

None of the cooperatives establishes price differentials to compensate individual producers for differences in volume or location. One has a differential for the sanitary quality of the milk at the time of its arrival at the plant and one makes a flat allowance for transportation costs. Under most conditions in Georgia, only the sanitary differential is desirable. Such a price difference is based on bacterial content of the milk and gives recognition to increased cost of producing milk of high sanitary quality. All the cooperatives in the State might find it helpful to provide such an incentive.

Only one association, a small distributing cooperative, does not test individual patrons' milk for butterfat content. The most common interval between tests is $3\frac{1}{2}$ days but the average for the other eight cooperatives is about $4\frac{1}{2}$ days. The annual average test of the milk received varies among the associations from about 4.2 to 4.5 percent butterfat.

QUALITY CONTROL

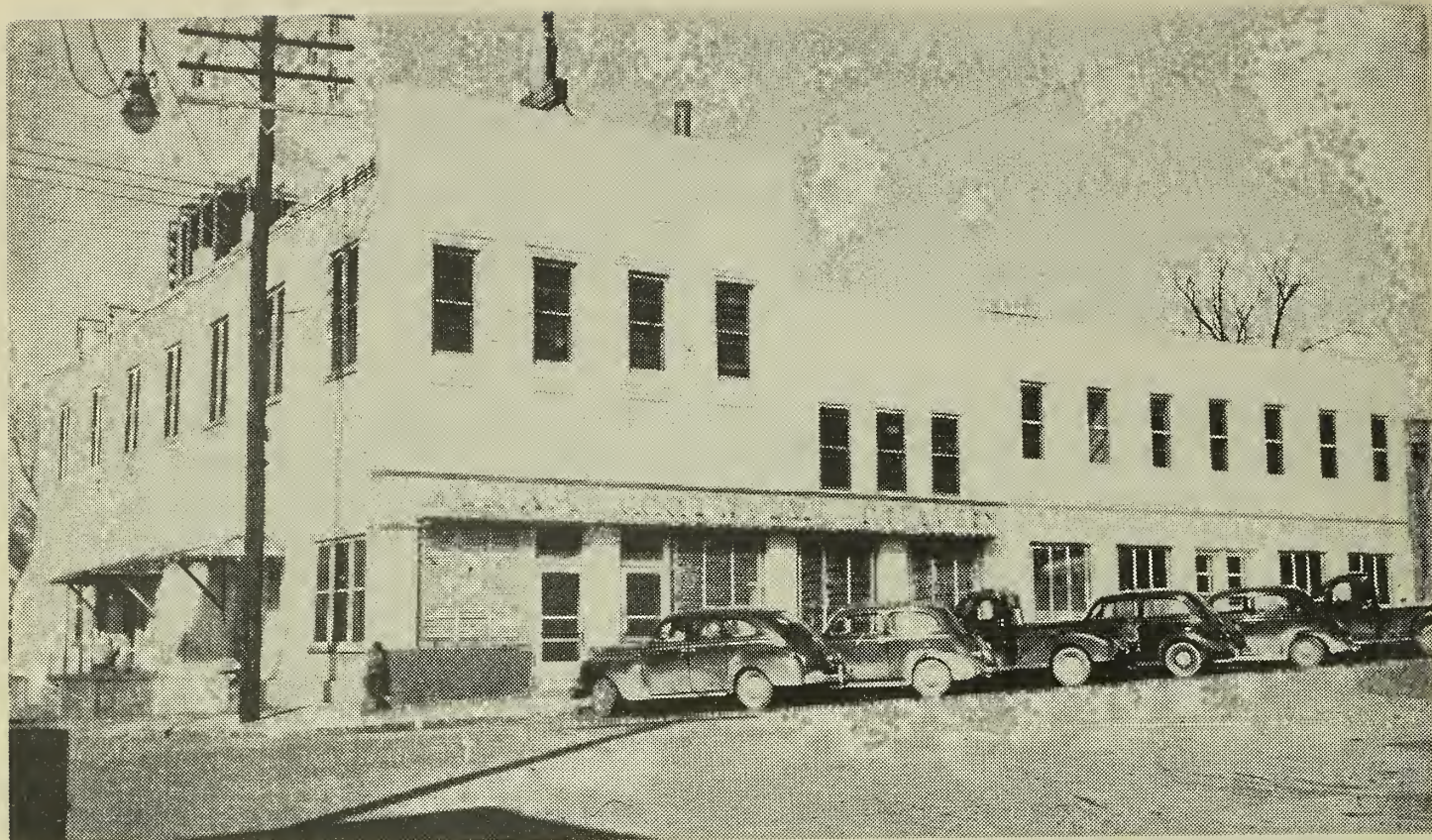
Five of the eight distributing cooperatives take bacterial tests of milk delivered by each producer as a part of their programs to improve the sanitary quality of their supplies of milk. However, only one association has a full-time fieldman working on farms with the producers.

All farms in the State are subject to occasional inspection by State inspectors. Farms operated by patrons of six of the nine cooperatives are also inspected by the health departments of the cities in which the milk is consumed. Patrons of one of the six cooperatives also receive inspection by the Army because part of their milk is sold to an Army post. One of the cooperatives whose patrons' farms are not inspected by officials of a city health department has a contract with a technician to take bacterial tests and make reports directly to individual producers. Farms of patrons of still another association are inspected by the Navy as a prerequisite for sales to a Naval hospital.

Most of the cooperatives do not have well rounded quality programs. There are some exceptions, however, and one cooperative has price differentials for milk based upon sanitary quality as evidenced by bacterial count.

MILK PROCUREMENT

None of the Georgia cooperatives operates truck routes or even supervises procurement of milk from farms. At four plants, all the milk is delivered by the producers themselves, and at three other plants producers deliver most of it. At one plant most of the milk is delivered by contract haulers, and at the ninth plant all the milk is delivered by contract haulers.



The Athens Cooperative Creamery is the only co-op in Georgia handling Grade B milk and farm separated cream as well as Grade A milk.

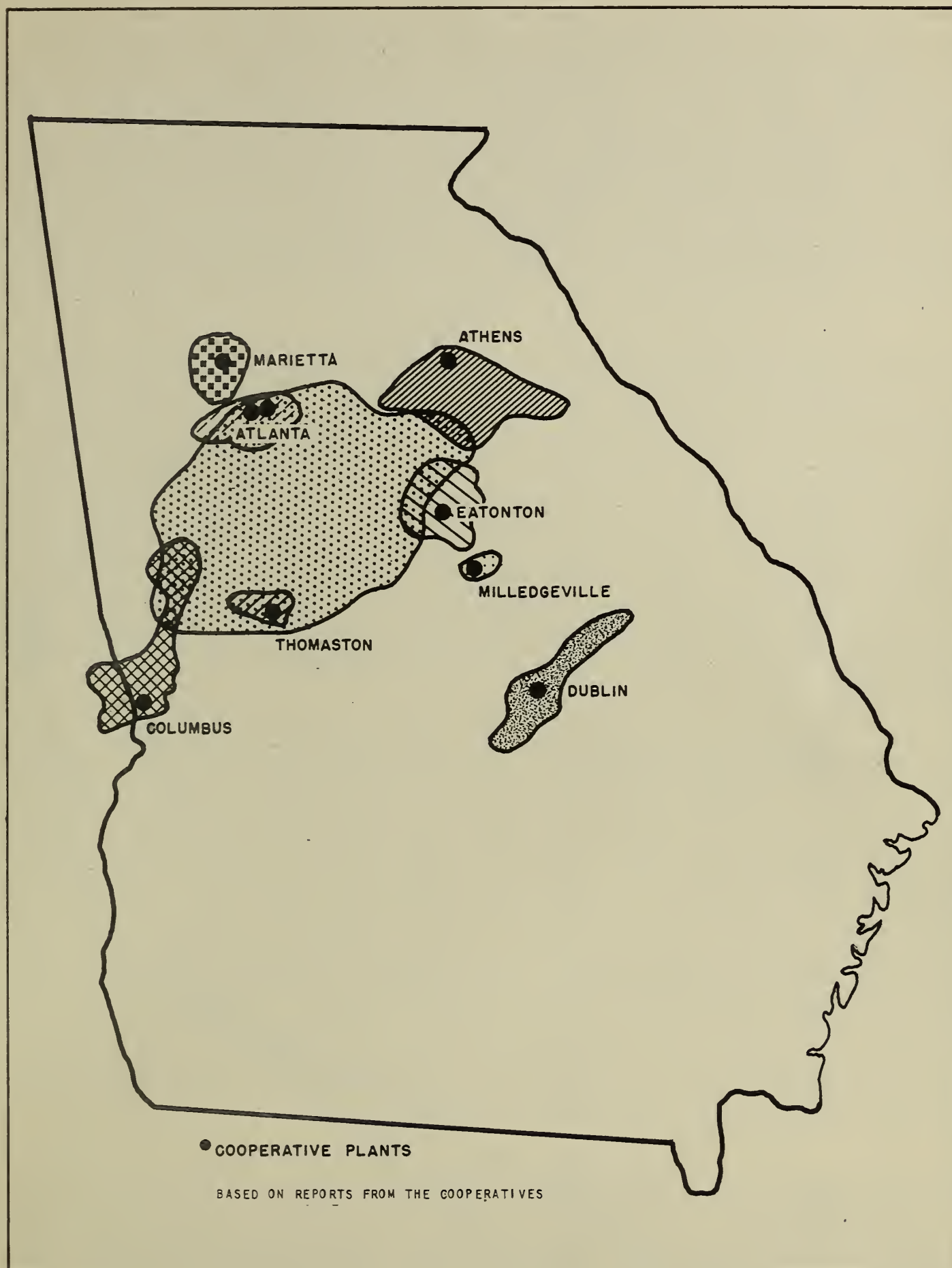
The contract haulers negotiate with the individual farmers and not the cooperatives. Several associations make regular deductions from milk checks, however, to pay the haulers. Such deductions range from less than 20 cents to over 40 cents per 10-gallon can. Complete information was not available in early 1947 but the average cost per can was apparently about 30 cents.

The farm areas from which the 9 cooperatives received milk in March 1947 are indicated in figure 6. Boundaries are rough approximations but indicate the size of the combined area served and the territories in which cooperatives are in competition with each other for milk supplies.

SEASONALITY OF MILK RECEIPTS

All nine cooperatives receive Grade A milk⁹ from producers. One association also receives Grade B milk and farm-separated cream for manufacturing purposes. All eight of the distributing associations purchase quantities of dairy products from other organizations for resale or use in preparation of other products.

⁹As used herein, "Grade A" milk includes all milk suitable for bottling purposes. Standards for judging its suitability vary according to local inspection requirements.



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FIGURE 6: MILK PROCUREMENT AREAS OF GEORGIA DAIRY COOPERATIVES, MARCH 1947

Average receipts of milk range from about 2,000 pounds a day for the smallest distributing cooperative to over 55,000 pounds for the largest. The combined average of the 8 cooperatives during their last fiscal years was 16,300 pounds a day. The annual average of four associations was less than 5,000 pounds of milk a day. All four are concerned with the need for increasing receipts of milk in order to achieve economies possible with a larger volume. Each of the other four distributing cooperatives receives more than 15,000 pounds of milk a day. On an annual basis, milk received by the distributing associations has ranged from about three-quarters of a million pounds to well over 20 million pounds.

Seasonal variation of milk receipts at the plants is high. The variation for three distributing cooperatives in 1946 is shown in figure 7. The other distributing associations have operated for such short periods that seasonal patterns have not yet developed. Seasonal variation curves for two of the three associations indicate that in June 1946 milk production was lower than in May or July, possibly due to a production factor such as unfavorable weather. The cooperative with an increase in volume in December compared with November had a definite program designed to increase receipts. July was the month of largest milk receipts for two of the three cooperatives. Receipts by all three associations were lowest in January. For each 100 pounds of milk received in January, the three distributing cooperatives had, respectively, 146, 150, and 188 pounds in July.

Such extreme variation results in increased operating costs. If a plant cannot handle all milk received in July, it must reject it or dispose of it at a loss. Either course jeopardizes the existence of the business. Yet, if the plant can handle all milk received in July, it must necessarily have equipment that is idle or used at far less than capacity during January, unless it obtains milk from other sources. Furthermore, to meet July requirements, it will have to use seasonal labor or maintain a labor force that could not be fully utilized in January in processing only milk received direct from farms. Obviously, then, if other factors remain constant, the greater the degree of seasonality in receipts, the higher the operating costs. Georgia cooperatives have sought to overcome this problem of shortages during part of the year by obtaining dairy products from other organizations to supplement the supplies they receive directly from producers.

Ice cream has proven a satisfactory outlet for part of the milk received from producers that would otherwise have been surplus during the season of flush production. Some of the remaining surplus milk has been used in manufacturing sweetened condensed milk, and the rest has been disposed of through other outlets.

Two of the cooperatives have established base-surplus pricing plans to reduce seasonality in the volume of milk received but only one associ-

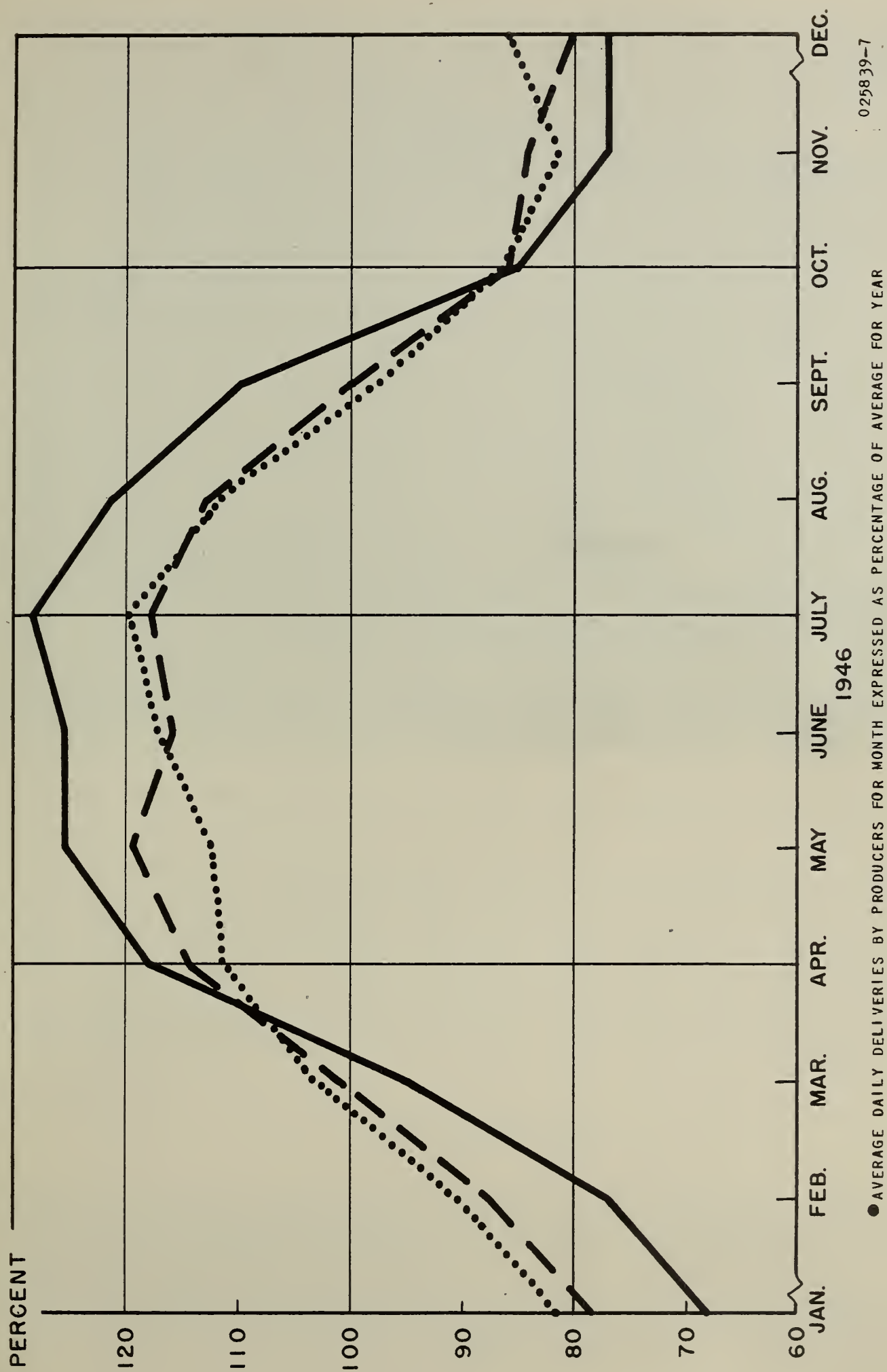
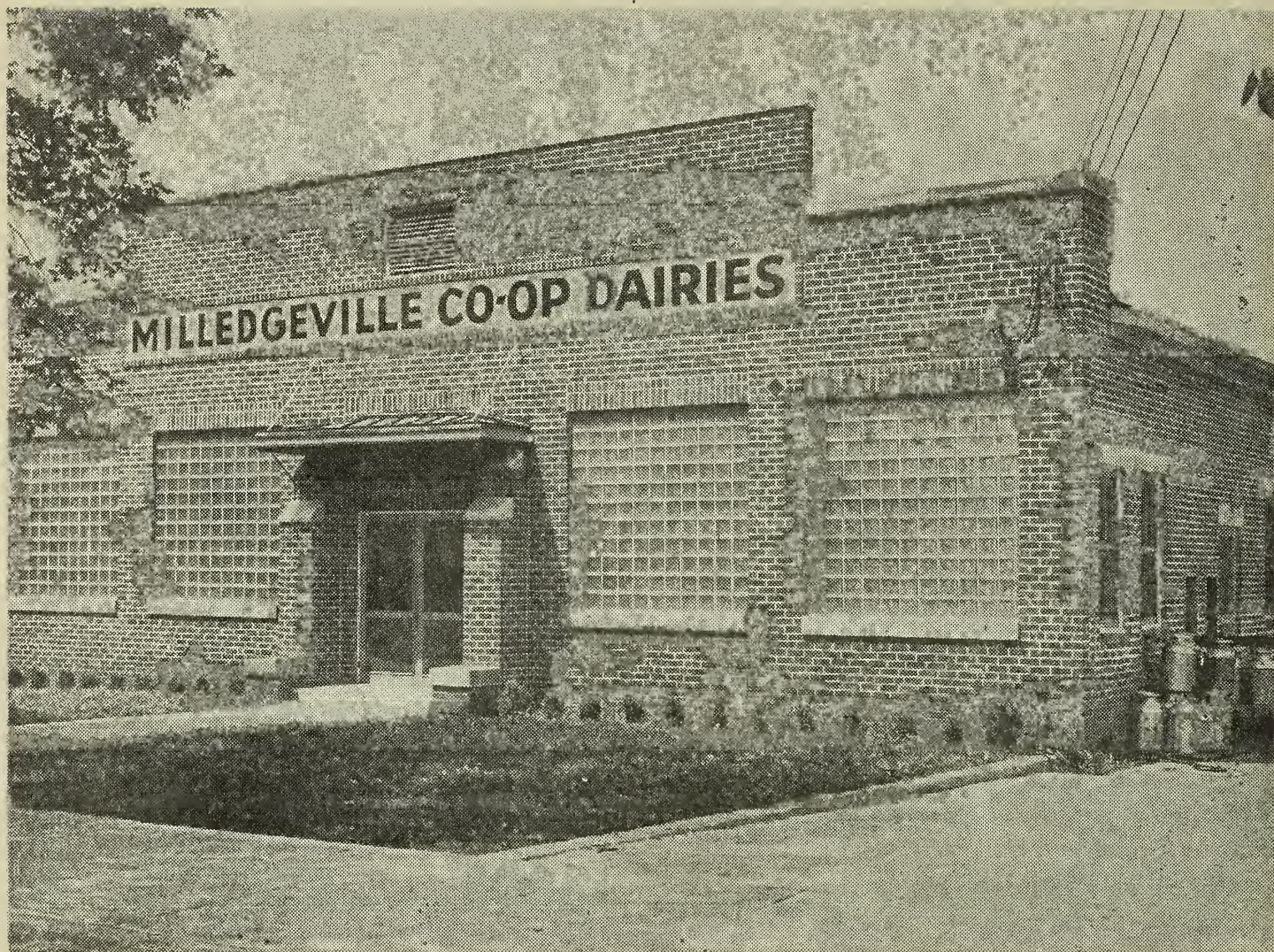


FIGURE 7: SEASONAL VARIATION IN QUANTITY OF MILK RECEIVED FROM INDIVIDUAL PRODUCERS, 3 LARGE DISTRIBUTING COOPERATIVES, GEORGIA, 1946●



This small modern plant is typical of those built by cooperatives organized in recent years.

ation used its plan during the short-supply season of 1946-47. That association established the last half of September 1946 as the base period and milk receipts from individual producers during that month determined the individual basic quotas. During five fall and winter months the association paid a substantial premium per hundredweight for all milk produced in excess of the base quantity. No provisions were made for comparable deductions for excess production during spring and summer months.

PLANT FACILITIES

Most of the cooperatives are operating plants that they own and built. Several have occupied buildings built by others for other purposes. In general, such buildings may serve a cooperative's needs during the first month or years of operation but usually the association will eventually construct a plant tailored to its business. Most of the Georgia plants and equipment are in very good condition. No association operates more than one plant.

In terms of the quantity of milk that it is designed to handle in one day, the largest cooperative distributing plant in Georgia is over a dozen times as large as the smallest. The estimated daily capacities of the distributing plants range from 700 to 9,000 gallons of Grade A milk. The average is about 3,175 gallons. The one association receiving manufacturing milk and farm-separated cream has additional space and facilities for receiving, processing, and storing such milk and cream.

Emphasis on plant sanitation and quality control of products varies considerably among the cooperatives. One association, with a large laboratory and special plant equipment, has given particular attention to this phase of the operation. Plants of six of the nine cooperatives are inspected periodically by health departments of the markets served.

PRODUCTS HANDLED AND SALES OUTLETS

The variety of products handled, including those purchased for resale or plant use, is shown in table 5. In addition to the products listed, two

Table 5. - Number of milk distributing cooperatives in Georgia that processed, or purchased for resale or plant use, specified dairy products, April 1947

PRODUCT	PROCESS FOR		PURCHASE FOR ^a	
	SALE	PLANT USE ^b	RESALE ^c	PLANT USE ^b
"Grade A" sweet milk.....	8	0	0	7 ^d
Whipping and-or coffee cream.	8	0	0	0
Chocolate milk or drink ^e	8	0	0	0
Cultured buttermilk.....	8	0	0	0
Ice cream.....	4	0	1	0
Butter.....	4	0	2	0
Cottage cheese.....	2	0	1	0
Condensed milk ^f	0	2	0	7
Nonfat dry milk solids.....	0	0	0	4
Goat milk.....	1	0	0	0

^aReceipts from individual producer-patrons are not termed purchases; however, receipts of products from other cooperatives, as well as those from proprietary organizations, are classified as purchases for purposes of this table.

^bUsed in preparation of other dairy products.

^cSold in form received.

^dIncludes whole milk, skim milk, fluid cream, and plastic cream purchased in bulk quantities.

^eAll but one association prepare a chocolate drink (contains about 2 percent butterfat.)

^fIncludes condensed skim milk and sweetened condensed milk.

Source: Based on records of the cooperatives.

cooperatives sell other products through dairy bars. Both sell milk shakes and one also sells ice cream sundaes. As might be expected, the distributing cooperatives with the largest dollar volumes of business market the largest variety of products.

In the markets served by three of the distributing cooperatives, all milk must be pasteurized before it can be sold for consumption in fluid form. In the other markets, 60 to 95 percent of the fluid milk is pasteurized.

One cooperative makes all retail sales of milk through association-operated stores and counters, and all wholesale sales are made at the plant to vendors. Five other distributing cooperatives sell at wholesale and retail through delivery routes and also sell at retail in plants or through association-operated stores. The other two distributing associations now sell only through routes but expect to have retail counters in their plants in the near future.

Of the seven associations maintaining retail routes to homes, four maintain every-other-day delivery and the others deliver daily. All eight distributing cooperatives use glass bottles only, with seven using round bottles and one square.

Most of the distributing cooperatives do not periodically summarize detailed records pertaining to operation of individual sales routes. Furthermore, a route may have both wholesale and retail customers. For these reasons it has been necessary to use managers' estimates, and arbitrarily assume certain divisions of business, in order to derive the data presented in table 6.

For most of the cooperatives, average loads on wholesale and retail routes are about the same. For three out of seven associations the average length of the wholesale routes has been estimated to be the same as that of the retail routes. For three out of the four remaining associations, the wholesale routes are longer than the retail.

In addition to its regular milk routes, one cooperative maintains three specialized wholesale ice cream routes. Another has a special milk route to an Army camp.

Three of the distributing cooperatives have no price discounts; three make discounts only to charitable or other public institutions; and two make general discounts for single purchases of eight or more quarts of bottled milk.

One of the youngest cooperatives does not advertise its products or services. All other distributing associations advertise in local newspapers, some rather infrequently and others regularly. One has a large billboard at the focal point of the city's business activity and another occasionally uses a local radio station.

Table 6. - Estimated average loads and lengths of routes of delivery trucks, wholesale and retail, of dairy cooperatives distributing milk in Georgia, April 1947^a

ASSOCIATION NUMBER ^b	WHOLESALE ROUTES			RETAIL ROUTES		
	NUMBER	AVERAGE LOAD	AVERAGE LENGTH	NUMBER	AVERAGE LOAD	AVERAGE LENGTH
		<i>Quarts</i>	<i>Miles</i>		<i>Quarts</i>	<i>Miles</i>
1.....	1	100	25	2	150	25
2.....	2	400	48	1	200	45
3.....	8	600	25	11	600	30
4.....	1	600	30	8	600	18
5.....	4	600	50	2	600	25
6.....	12	1,000	13	9	1,000	13
7.....	3	1,000	27	5	1,000	27
Simple average...	4.4	614.3	31.1	5.4	592.8	26.1

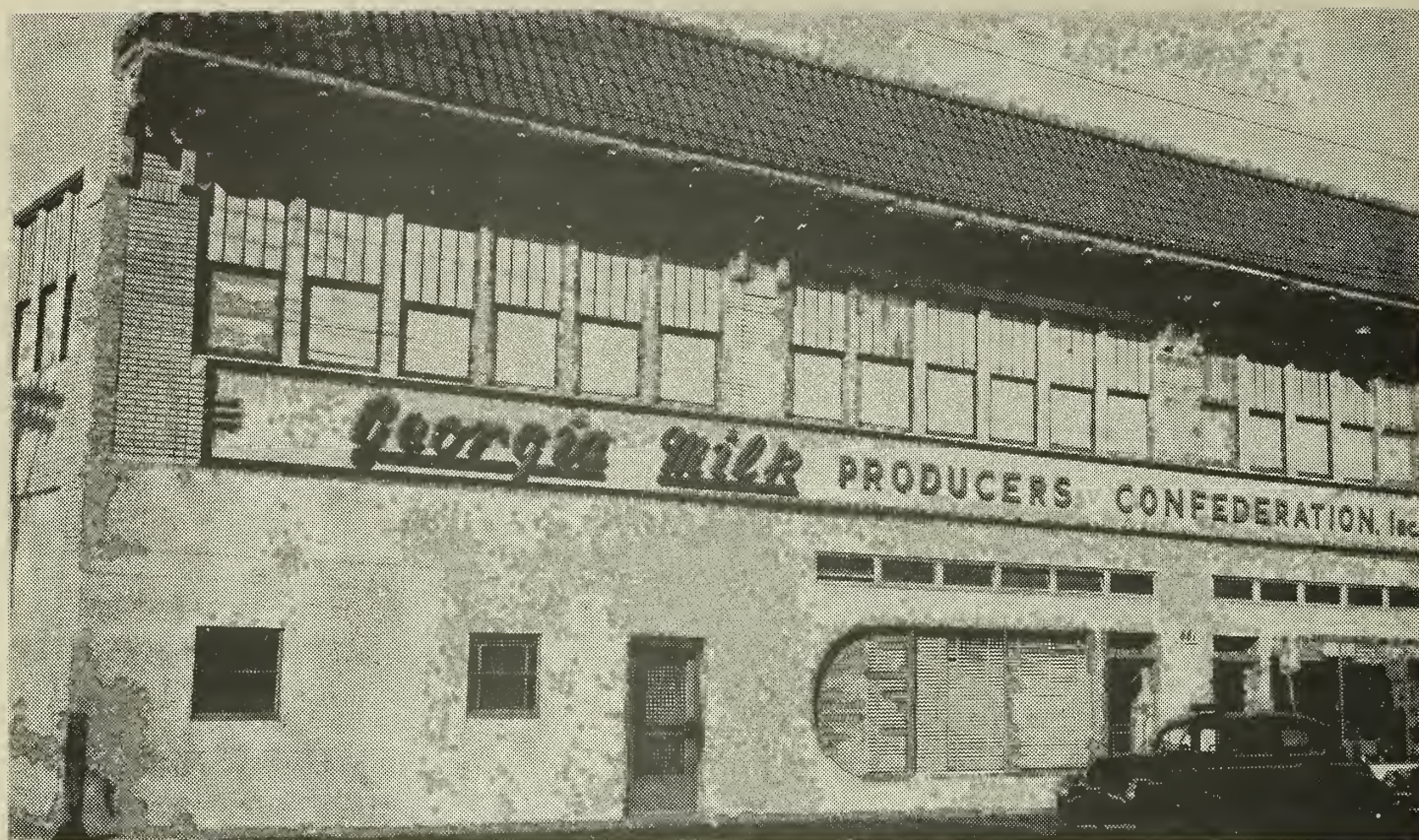
^aOne distributing association does not maintain either wholesale or retail routes. No delivery is provided for sales at wholesale to vendors and retail sales are made through stores operated by the association.

^bNumbers in this table do not refer to the same associations as do the numbers in other tables in this report.

Source: Based on reports from the cooperatives.

The wholesale and retail proportions of total dollar sales vary considerably among the distributing cooperatives. The proportion at wholesale ranges from about one-fifth to three-fourths of the total sales but averages about half.

In one respect, dollar sales figures more accurately reflect the cooperatives' volumes of business than do the figures for receipts of milk from individual producers. Several associations purchase substantial quantities of dairy products from other organizations and therefore have considerably larger volumes of business than receipts of milk from farmers alone would show. However, the dollar figures are not wholly satisfactory because some distortion arises from the fact that, per unit of product, advance payments to producers and sales prices for finished products vary considerably among the cooperatives.



Georgia Milk Producers Confederation, Inc., sells at retail only through its own stores.

Total sales, without adjustments for inventory changes, range from an annual rate of about \$125,000 to over \$1,750,000.¹⁰

FINANCIAL RECORDS

Financial records enable the management of a cooperative to determine whether an association has sufficient capital, what the costs of operation are and, possibly, how costs may be reduced. They serve as a check on efficiency of operation and integrity of the persons employed. It is therefore extremely important that they be accurate and as complete as practicable.

The annual audits of Georgia cooperatives are, in each case, made by professional accountants. The same concern is employed by three cooperatives and the other six associations employ six other independent accountants or accounting firms. If the various dairy cooperatives could agree, there would be some advantage to having only one or possibly two firms make the audits for all associations in the State. The nature of the cooperative form of business calls for somewhat different accounting treatment than a proprietary business. The content and value of the audit reports is rather variable at present.

¹⁰The figures are given in terms of annual rates rather than actual figures because two of the cooperatives had not operated a full twelve-month period by the end of fiscal years terminating between July 1, 1946, and June 30, 1947. Their sales figures were increased by amounts necessary to determine the 12-month figure if business continued at the same rate as for the part-year period.

The officers and supervisory employees of all but one of the 9 cooperatives are bonded. Most of the 8 cooperatives also bond all other employees. In each case, the cooperative secures the bond from a commercial bonding organization and pays the cost. Bonds of this nature cast no reflection on the integrity of any individual and their use is merely a common-sense business precaution.

Financial data for the group of nine dairy cooperatives are summarized in subsequent tables. Some adjustments in actual figures were made because of differences in the forms used by the individual cooperatives. Estimates were made when the audit reports did not give a distribution of costs that permitted use of exact figures for each item. Thus, a detailed analysis of each cooperative's records would result in some changes in figures given in the tables. However, the changes would not be large enough to be significant and do not detract from the value of the tables.

The balance sheets at the end of the most recent fiscal years of the associations are summarized in table 7.

The assets represent what the cooperative owns and are the total value of its physical resources. Liabilities are what a cooperative owes others, and equities are the investments of producer-patrons. "Current assets" may fairly readily be converted into cash in case of emergency or dissolution, whereas "Fixed Assets" are less readily convertible to cash and are depreciated in value, on the association's records, over a period of years. The "Investments" consist of investments in other organizations. The "Other Assets" are small amounts of property or financial claims that do not fall within the other categories. The average distribution of assets of the milk distributing cooperatives is shown in figure 8.

"Current Liabilities" are liabilities which must be met within one year or less. The only "Long-Term Liabilities" shown on table 7 are the balances that will be due on loans from lending institutions at the end of each cooperative's next fiscal year.

"Patrons' Equities" represent the amounts of capital supplied by producer-patrons and, to a limited extent, by persons outside the cooperative who have loaned money simply as an investment. Included in the capital supplied by patrons are current patronage refunds, and portions of patronage refunds for earlier years that were not paid out in cash, and capital supplied under other phases of the cooperatives financing programs. Equities of non-patrons are evidenced by preferred stock or other certificates but are very small for this group of associations. For most of the cooperatives, the figure shown on table 7 actually represents patrons' equities only. For that reason, the term "Patrons' Equities" is used rather than "Patrons and Investors' Equities."

Table 7. - Comparative balance sheets, fiscal years ended between July 1, 1946 and June 30, 1947 of dairy cooperatives operating plants in Georgia, April 1947

PARTICULARS	ASSOCIATION NUMBER ^a									AVERAGE FOR THE 8 DISTRIBUTING ASSOCIATIONS
	1	2	3	4	5	6	7	8	9 ^b	
ASSETS										
Current assets:										
Cash on hand and in banks.....	\$4,448.04	\$1,751.30	\$7,198.12	\$132,334.83	\$35,942.64	\$49,093.68	\$15,782.55	\$16,053.03	\$26,280.73	\$32,825.52
Accounts receivable - Trade (Net).....	25,965.88	8,933.75	3,678.99	62,315.87	264.62	28,740.08	9,370.57	9,176.87	46,125.48	18,555.83
Accounts receivable - Other (Net).....	-	202.64	418.27	-	1,764.16	-	-	6.15	12,287.13	298.90
Notes receivable (Net).....	-	-	-	-	-	-	357.99	-	-	44.75
Inventories:										
Dairy products.....	6,619.40	642.18	149.14	19,944.03	54,328.08	1,105.73	1,385.32	360.56	2,570.00	10,566.80
Manufacturing supplies.....	37,829.93	2,657.15	1,622.25	46,924.46	37,991.68	-	598.14	993.34	-	16,077.12
Patrons' supplies.....	-	-	2,641.46	202.35	-	-	-	-	13,591.95	355.48
Total current assets.....	74,863.25	14,187.02	15,708.23	261,721.54	130,291.18	78,939.49	27,494.57	26,589.95	100,855.29	78,724.40
Investments:										
U. S. Government bonds.....	5,036.99	-	-	151,700.00	-	-	-	-	-	19,592.13
Stock - Columbia Bank for Cooperatives.....	-	1,800.00	1,800.00	-	-	4,400.00	2,000.00	1,100.00	1,800.00	1,387.50
Other.....	-	-	-	2,405.39	-	-	56.27	340.60	12,311.15	350.28
Total investments.....	5,036.99	1,800.00	1,800.00	154,105.39	-	4,400.00	2,056.27	1,440.60	14,111.15	21,329.91
Fixed assets:										
Land.....	15,753.40	1,714.68	1,612.55	56,075.00	135,172.00	17,547.03	2,343.01	-	7,133.64	28,777.21
Buildings.....	65,740.16	20,174.83	20,000.00	-	113,293.81	43,011.41	30,731.16	5,939.90	35,104.53	37,361.41
Machinery and equipment.....	190,222.17	31,222.06	33,174.39	221,120.31	210,543.32	79,771.30	35,272.71	27,875.40	82,390.02	103,650.21
Other.....	3,933.89	-	-	41,849.69	17,656.85	-	-	-	-	7,930.05
Total.....	275,649.62	53,111.57	54,786.94	319,045.00	476,665.98	140,329.74	68,346.88	33,815.30	124,628.19	177,718.88
Less: Allowance for depreciation.....	106,612.93	3,668.69	4,842.96	217,180.83	99,042.95	8,798.92	6,395.53	7,407.71	16,494.63	56,743.82
Total fixed assets (Net).....	169,036.69	49,442.88	49,943.98	101,864.17	377,623.03	131,530.82	61,951.35	26,407.59	108,133.56	120,975.06
Other assets:										
Unexpired insurance.....	-	1,700.34	234.27	2,943.25	4,161.44	373.66	505.85	122.18	871.25	1,255.12
Office supplies.....	-	-	-	1,737.47	-	-	-	25.13	-	220.33
Bottles.....	2,318.17	1,955.44	777.00	4,863.79	4,667.38	1,577.00	2,059.04	215.39	-	2,304.15
Miscellaneous.....	-	189.64	230.22	-	4,565.60	14,883.91	50.00	254.59	-	2,521.75
Total other assets.....	2,318.17	3,845.42	1,241.49	9,544.51	13,394.42	16,834.57	2,614.89	617.29	871.25	6,301.35
Total assets.....	251,255.10	69,275.32	68,693.70	527,235.61	521,308.63	231,704.88	94,117.08	55,055.43	223,971.25	227,330.72
LIABILITIES AND EQUITIES										
Current liabilities:										
Notes payable.....	-	10,512.37	6,174.01	-	40,000.00	22,689.07	10,800.00	4,641.85	12,000.00	11,852.16
Accounts payable - Trade.....	3,803.98	2,819.36	7,140.92	12,392.35	18,245.67	9,339.10	4,889.11	5,501.30	4,400.80	8,016.48
Accounts payable - Patrons.....	34,879.14	4,587.20	3,406.28	80,389.73	45,977.78	50,557.24	3,945.87	8,111.08	40,777.71	28,981.79
Accrued liabilities.....	9,747.72	690.93	1,324.54	13,341.51	10,978.07	3,375.94	2,485.96	940.08	108.22	5,360.59
Other.....	-	-	222.89	1,814.15	479.58	4,307.84	2,185.38	-	-	1,126.23
Total current liabilities.....	48,430.84	18,609.86	18,268.64	107,937.74	115,681.10	90,269.19	24,306.32	19,194.31	57,286.73	55,337.25
Long-term liabilities:										
Notes payable.....	-	26,170.08	29,716.55	-	-	56,283.36	21,720.53	9,000.00	4,000.00	17,861.32
Total liabilities.....	48,430.84	44,779.94	47,985.19	107,937.74	115,681.10	146,552.55	46,026.85	28,194.31	61,286.73	73,198.57
Patrons' equities:										
Capital stock, certificates, reserves.....	202,824.26	24,495.38	20,708.51	419,297.87	405,627.53	85,152.33	48,090.23	26,861.12	162,684.52	154,132.15
Total liabilities and equities.....	\$251,255.10	\$69,275.32	\$68,693.70	\$527,235.61	\$521,308.63	\$231,704.88	\$94,117.08	\$55,055.43	\$223,971.25	\$227,330.72

^aNumbers in this table refer to the same associations as the numbers in tables 8 to 13 in this report. ^bThe milk receiving association.

Source: Based on annual audit reports of the cooperatives.

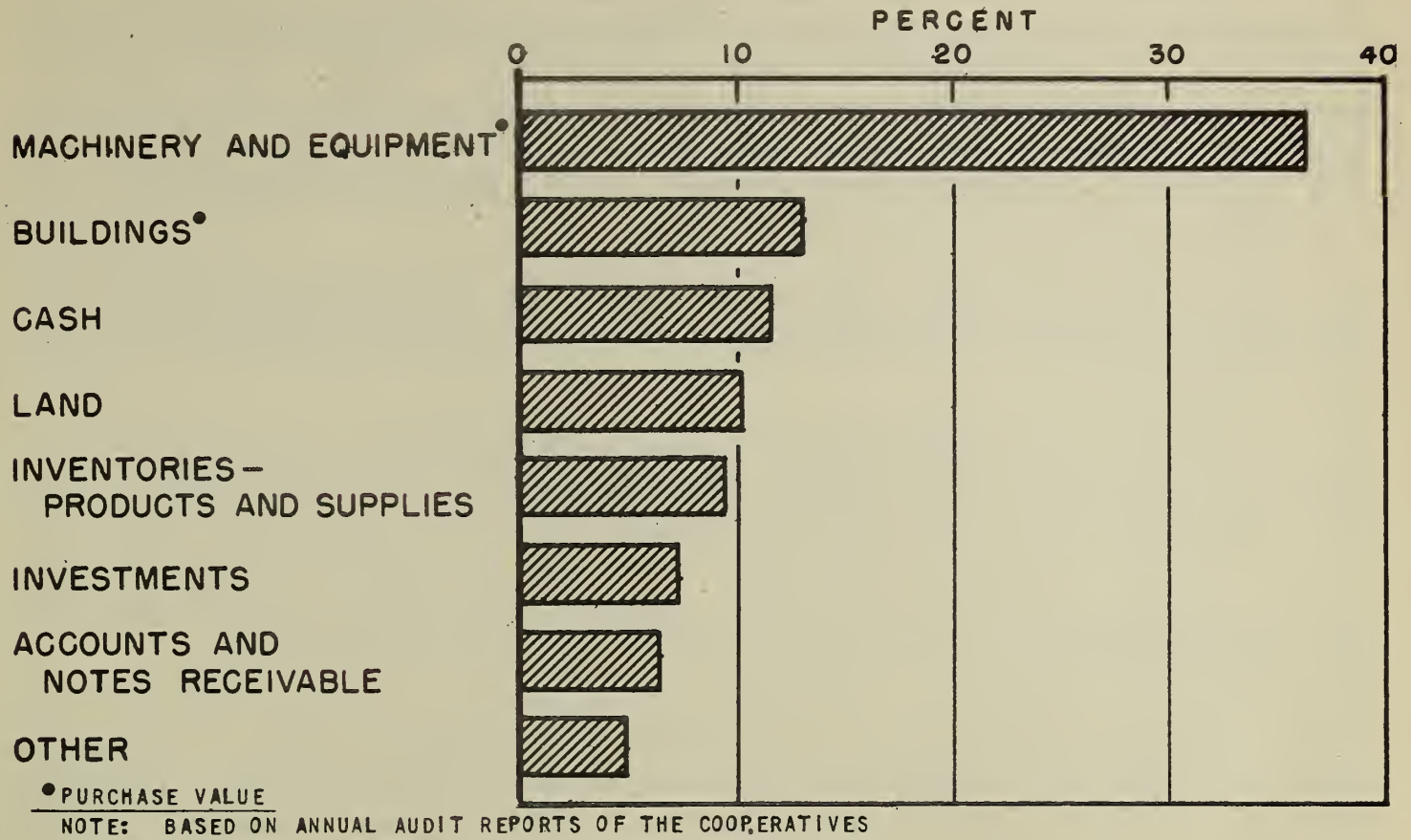
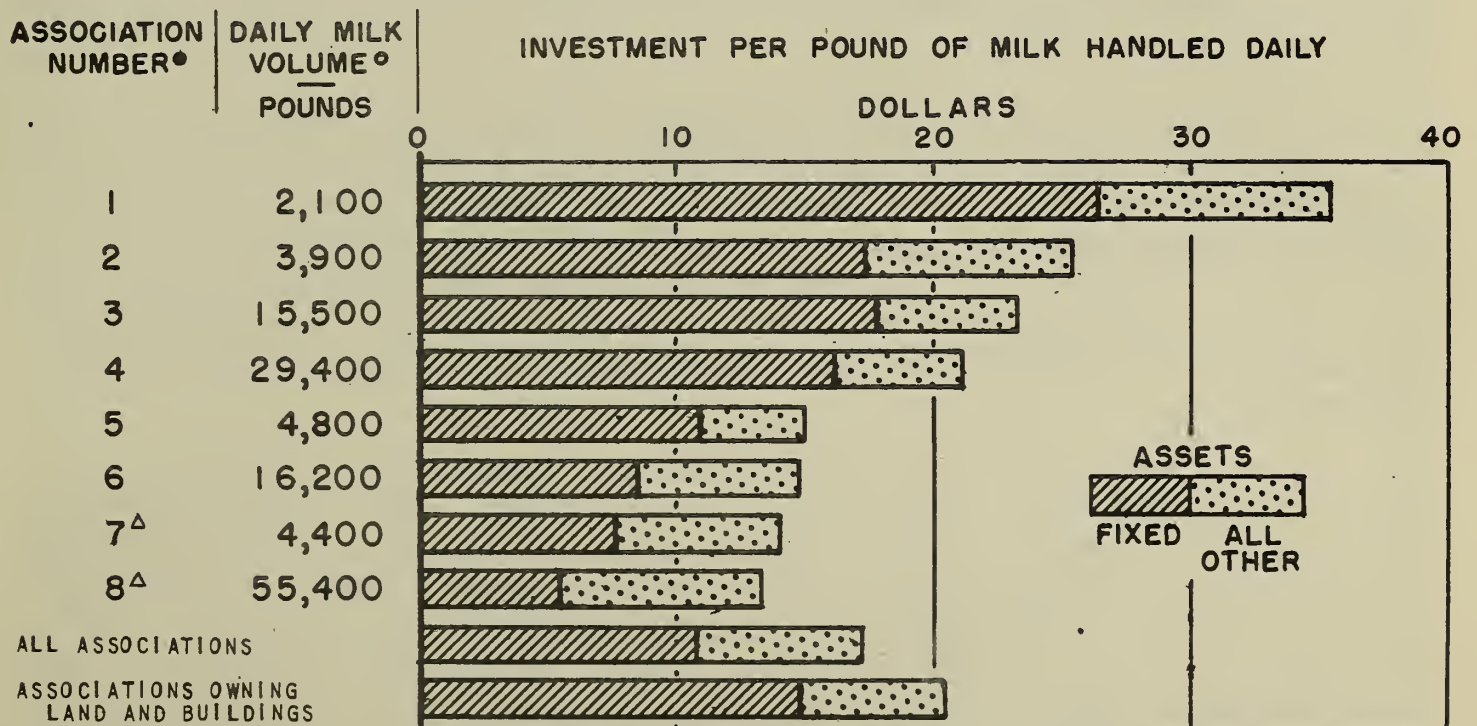


FIGURE 8: AVERAGE DISTRIBUTION OF ASSETS, FISCAL YEARS ENDED BETWEEN JULY 1, 1946, AND JUNE 30, 1947, OF DAIRY COOPERATIVES DISTRIBUTING MILK IN GEORGIA, APRIL 1947



NOTE: BASED ON RECORDS OF THE COOPERATIVES

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- NUMBERS IN THIS FIGURE DO NOT REFER TO THE SAME ASSOCIATIONS AS DO THE NUMBERS IN TABLES.
- NOT INCLUDING MILK RECEIVED FROM SOURCES OTHER THAN INDIVIDUAL PRODUCERS.
- Δ DOES NOT OWN EITHER BUILDING IN WHICH MILK IS PROCESSED OR THE LAND IT OCCUPIES.

FIGURE 9: INVESTMENTS (TOTAL ASSETS AT COST) PER POUND OF MILK HANDLED DAILY FOR PATRONS OF DAIRY COOPERATIVES DISTRIBUTING MILK IN GEORGIA, APRIL 1947

The financial tables in this report were prepared to conform with accepted principles of accounting. Questions may arise as to the nature of certain items entered in table 7, however. Under "Fixed Assets, Machinery and Equipment," are included office furniture and fixtures, delivery equipment, and cases and cans, in addition to plant machinery and equipment. Leasehold improvements, where such have been made, are included in "Other Fixed Assets."

If value is given to the businesses turned in by producer-distributors when they joined the cooperative, it is included in "Other Assets, Miscellaneous."

Under "Current Liabilities," the "Amounts Payable-Patrons" includes the amounts due producers as current advance payments for milk received and also relatively small amounts due haulers when the cooperative makes the deductions as a service to patrons. "Accrued Liabilities" includes such items as bottle deposits and withholding tax, and "Other Current Liabilities" unredeemed milk tickets or coupons and miscellaneous.

The amounts of assets and liabilities that each cooperative had per gallon of milk received from individual producers is shown in table 8. There is a definite correlation between volume and investment. As might be expected, the cooperative with the largest volume of milk received from producers had the smallest amount of "Total Assets" per gallon. The cooperative with the smallest volume of receipts from producers had the largest amount of "Total Assets" per gallon. The correlation is not perfect throughout, however, due to the existence of certain variables such as owning versus leasing of facilities, and the general level of local real estate values.

Furthermore, purchases of dairy products from other organizations are not included. Cooperatives 3 and 7 (table 8) appear to have had rather large amounts of assets and liabilities per gallon of milk handled but both purchased relatively large quantities of dairy products. The table is of value, however, in that the averages for the cooperatives give the approximate requirements of similar associations of moderate size. Investment per pound of milk handled daily is shown graphically in figure 9.

The relationship of "Current Assets" to "Current Liabilities" is a measure of the current solvency of the business. The "Current Assets" are needed for other purposes than payment of debts and should, therefore, exceed "Current Liabilities." It is normally considered adequate to have \$2 in current assets for each \$1 in current liabilities. During the present period of high operating costs, it may be desirable to have an even higher ratio. Only one of the 9 cooperatives in Georgia equalled or exceeded the goal of a 2 to 1 ratio (table 9). Three associations did not have even a 1 to 1 ratio. As shown by the last column of table 9 this meant that "Current Liabilities" exceeded "Current Assets" for those associations. Although they needed working capital, they had operated for such brief periods that it was not at all surprising that they had not yet achieved financial stability.

Table 8. - Comparative balance sheets, per unit of volume handled, fiscal years ended between July 1, 1946 and June 30, 1947 of dairy cooperatives distributing milk in Georgia, April 1947

PARTICULARS	AMOUNT PER GALLON OF MILK RECEIVED FROM INDIVIDUAL PRODUCERS ^a								
	ASSOCIATION NUMBER ^b								SIMPLE AVERAGE
	1	2	3	4	5	6	7	8	
Dollars									
ASSETS									
Current assets:									
Cash on hand and in banks.....	.0068	.0117	.0817	.0563	.0289	.0713	.0944	.0861	.0546
Accounts receivable - trade (net).....	.0395	.0597	.0418	.0265	.0002	.0417	.0561	.0492	.0393
Accounts receivable - other (net).....	-	.0014	.0048	-	.0014	-	-	.0001	.0010
Notes receivable (net).....	-	-	-	-	-	-	.0021	-	.0003
Inventories:									
Dairy products.....	.0101	.0043	.0017	.0085	.0436	.0016	.0083	.0019	.0100
Manufacturing supplies.....	.0576	.0177	.0184	.0200	.0305	-	.0036	.0053	.0191
Patrons' supplies.....	-	-	.0300	.0001	-	-	-	-	.0038
Total current assets.....	.1140	.0948	.1784	.1114	.1046	.1146	.1645	.1426	.1281
Investments:									
U. S. Government bonds.....	-	-	-	.0646	-	-	-	-	.0081
Stock - Columbia Bank for Cooperatives..	.0077	.0120	.0205	-	-	.0064	.0120	.0059	.0080
Other.....	-	-	-	.0010	-	-	.0003	.0018	.0004
Total investments.....	.0077	.0120	.0205	.0656	-	.0064	.0123	.0077	.0165
Fixed assets:									
Land.....	.0240	.0115	.0183	.0238	.1085	.0255	.0140	-	.0282
Buildings.....	.1001	.1348	.2272	-	.0909	.0625	.1838	.0319	.1039
Machinery and equipment.....	.2896	.2085	.3768	.0941	.1690	.1158	.2110	.1495	.2018
Other.....	.0060	-	-	.0178	.0141	-	-	-	.0047
Total.....	.4197	.3548	.6223	.1357	.3825	.2038	.4088	.1814	.3386
Less: Allowance for depreciation.....	.1623	.0245	.0550	.0924	.0795	.0128	.0382	.0397	.0630
Total fixed assets (net).....	.2574	.3303	.5673	.0433	.3030	.1910	.3706	.1417	.2756
Other assets:									
Unexpired insurance.....	-	.0114	.0027	.0013	.0033	.0006	.0030	.0007	.0029
Office supplies.....	-	-	-	.0007	-	-	-	.0001	.0001
Bottles.....	.0035	.0131	.0088	.0021	.0037	.0023	.0123	.0011	.0059
Miscellaneous.....	-	.0012	.0026	-	.0037	.0216	.0003	.0014	.0038
Total other assets.....	.0035	.0257	.0141	.0041	.0107	.0245	.0156	.0033	.0127
Total assets.....	.3826	.4628	.7803	.2244	.4183	.3365	.5630	.2953	.4329
LIABILITIES AND EQUITIES									
Current liabilities:									
Notes payable.....	-	.0702	.0701	-	.0321	.0329	.0646	.0249	.0309
Accounts payable - trade.....	.0058	.0189	.0811	.0052	.0146	.0136	.0292	.0295	.0247
Accounts payable - patrons.....	.0531	.0307	.0387	.0342	.0369	.0734	.0236	.0435	.0418
Accrued liabilities.....	.0149	.0046	.0151	.0057	.0088	.0049	.0149	.0050	.0092
Other.....	-	-	.0025	.0008	.0004	.0063	.0131	-	.0029
Total current liabilities.....	.0738	.1244	.2075	.0459	.0928	.1311	.1454	.1029	.1155
Long-term liabilities:									
Notes payable.....	-	.1748	.3376	-	-	.0817	.1299	.0483	.0965
Total liabilities.....	.0738	.2992	.5451	.0459	.0928	.2128	.2753	.1512	.2120
Patrons' equities:									
Capital stock, certificates, reserves...	.3088	.1636	.2352	.1785	.3255	.1237	.2877	.1441	.2209
Total liabilities and equities.....	.3826	.4628	.7803	.2244	.4183	.3365	.5630	.2953	.4329

^aGallonage figure does not include purchases of dairy products from proprietary or cooperative organizations; includes receipts from individuals of Grade A whole milk, Grade B whole milk, and milk equivalent of farm-separated cream.

^bNumbers in this table refer to the same associations as the numbers in tables 7 and 9 to 13 in this report.

Source: Based on annual audit reports of the cooperatives.

Table 9. - Financial ratios and amount of working capital, fiscal years ended between July 1, 1946, and June 30, 1947, of dairy cooperatives operating plants in Georgia, April 1947

ASSOCIATION NUMBER ^a	RATIOS			WORKING CAPITAL (CURRENT ASSETS LESS CURRENT LIABILITIES)
	CURRENT ASSETS TO CURRENT LIABILITIES	PATRONS' EQUITIES		
		TO TOTAL LIABILITIES	TO NET FIXED ASSETS	
1.....	\$1.55 to 1	\$4.19 to 1	\$1.20 to 1	\$26,432.41
2.....	.76 to 1	.55 to 1	.50 to 1	(4,422.84) ^b
3.....	.86 to 1	.43 to 1	.41 to 1	(2,560.41) ^b
4.....	2.42 to 1	3.88 to 1	4.12 to 1	153,783.80
5.....	1.13 to 1	3.51 to 1	1.07 to 1	14,610.08
6.....	.87 to 1	.58 to 1	.65 to 1	(11,329.70) ^b
7.....	1.13 to 1	1.04 to 1	.78 to 1	3,188.25
8.....	1.39 to 1	.95 to 1	1.02 to 1	7,395.64
9 ^c	1.76 to 1	2.65 to 1	1.50 to 1	43,568.56
Weighted average..	1.42 to 1	2.11 to 1	1.27 to 1	23,387.15

^aNumbers in this table refer to the same associations as the numbers in tables 7 and 8 and 10 to 13 in this report.

^bDeficit, amount by which current liabilities exceeded current assets.

^cThe milk receiving association.

Source: Based on annual audit reports of the cooperatives.

If the cooperative's "working capital" does not exceed long-term liabilities, interest on and amortization of debts may become burdensome. The association may not have enough working capital to meet current needs. Four of the cooperatives were in strong positions in respect to working capital and a fifth had only slightly less than its long-term liabilities (tables 7 and 9).

It is desirable to have "Patrons' Equities" exceed "Total Liabilities" by about 2 to 1. That relationship indicates the extent to which the cooperative is financed by owner capital and by borrowed capital. Financial structures of four of the cooperatives more than met this test and, as a group, the entire nine associations were in a satisfactory position.

The ratio of "Patrons' Equities" to "Fixed Assets" is perhaps less significant than the other two ratios described but does show whether or not patrons are providing some of the working capital needed by their cooperative. If fixed assets exceed patrons' equities, it is usually an indication of high fixed charges. During periods of price declines, such

fixed charges may become a serious financial burden. The ratio of patrons' equities to fixed assets also indicates a cooperative's ability to pay off its creditors in case of dissolution. For an operating organization, it is therefore a measure of ability to borrow at reasonable rates. A ratio of 1.5 to 1 is often considered adequate. Only two of the associations met this standard.

In summary of the ratio analysis, it may be noted that the financial structures of most of the cooperatives do not come up to accepted standards. As stated earlier, however, this is not surprising nor should it be interpreted to mean that the growth of dairy cooperatives in the State has been unsound. On the contrary, if any one of them should discontinue operations at some future date, it is not likely to be the result of a currently existing financial weakness.

OPERATING COSTS

The most recent annual operating statements of the cooperatives are summarized in table 10. The "Gross Realization" is the total amount of money received by the cooperative for dairy products sold and services rendered, after an adjustment has been made for changes in inventories.

The "Other Receipts" include all miscellaneous receipts of capital. Association number 9, the milk receiving cooperative, has a very large figure for "Other Receipts" as a result of the exceptionally large volume of feed it handles. "Patronage Refunds" include all current refunds made in cash, stock, certificates, or book credits.

The "Patronage Refunds as proportion of Gross Realization" is comparable in some respects to the "percentage of profit" for a non-cooperative concern. It is in direct contrast, however, with respect to prospective utilization. Of the three associations whose savings were less than 5 percent of their "Gross Realization," two are rather recently organized distributing cooperatives and the other is the milk receiving cooperative.

The distribution of each dollar received for milk marketed by the group of milk distributing cooperatives is illustrated in figure 10. This indicates that a rather high proportion of the sales dollar received by the cooperatives is passed on to the farmers.

In making operating cost comparisons on the basis of "expense per pound of milk received from individual patrons," some distortion of relationships arises because purchases of dairy products from other organizations vary considerably in relative importance among the associations. Not all the cooperatives summarize the quantities purchased and therefore operating costs cannot be calculated readily on a basis to include all quantities of milk solids actually handled by each cooperative. The effect of the distortion is that, insofar as other things are equal, the cooperatives having the larger purchases, in relation to their total volumes, appear to have the higher costs but larger net savings per unit of product.

Table 10. - Comparative summaries of operating statements, fiscal years ended between July 1, 1946 and June 30, 1947 of dairy cooperatives operating plants in Georgia, April 1947

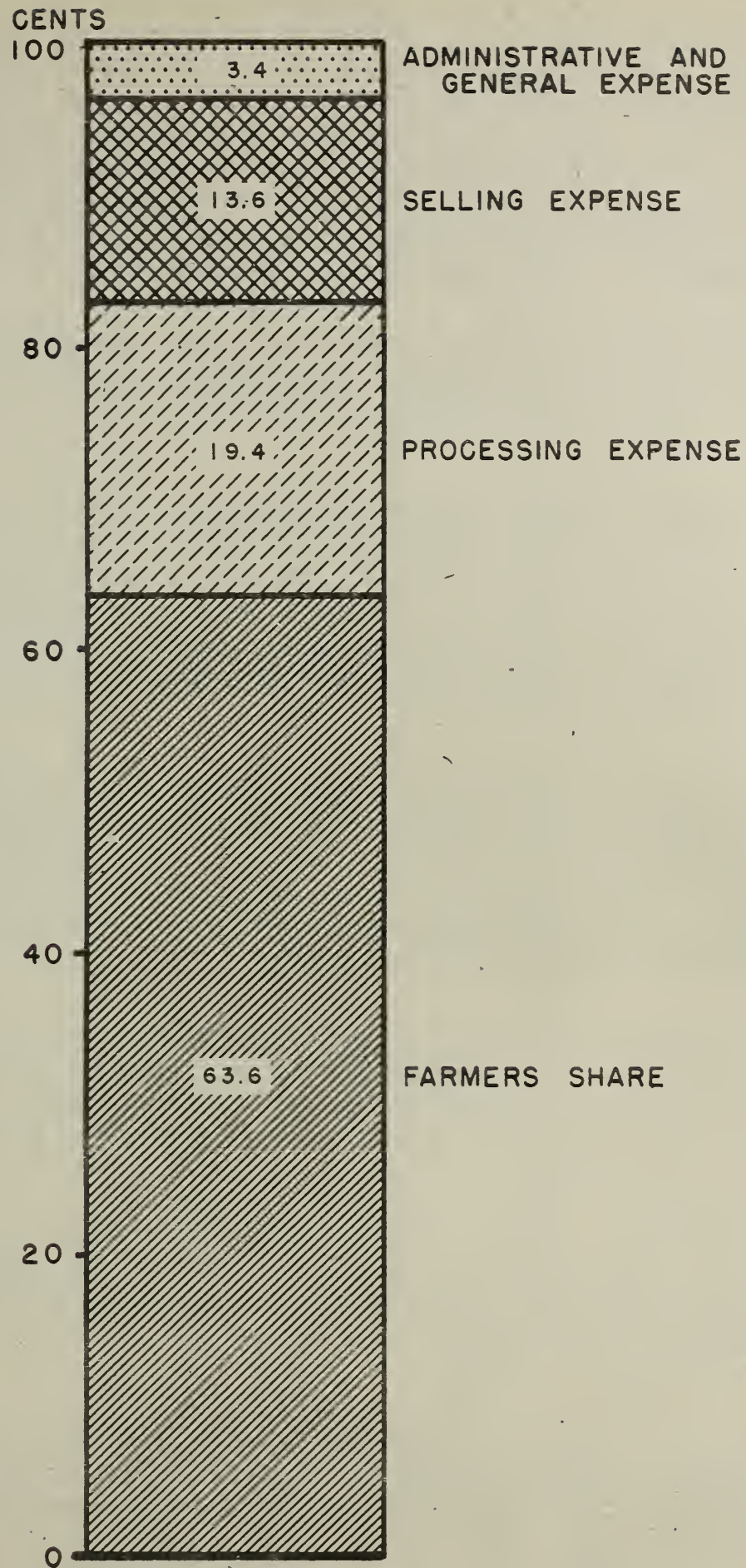
PARTICULARS	ASSOCIATION NUMBER ^a									AVERAGE FOR 8 DISTRIBUTING ASSOCIATIONS
	1	2	3	4	5	6	7	8	9 ^b	
Gross realization.....	\$7 07,542.30	\$92,211.38	\$94,685.07	\$1,760,322.83	\$1,117,994.02	\$539,793.28	\$191,332.77	\$133,857.36	\$1,406,082.72	\$579,717.38
Operating expenses:										
Processing.....	180,686.69	14,323.43	31,178.64	261,668.29	243,686.72	80,271.69	51,775.47	38,250.02	48,067.59	112,730.12
Selling.....	75,174.89	8,189.79	12,258.44	242,222.67	184,451.70	79,507.36	20,698.24	9,317.08	64,416.37	78,977.52
Administrative and general.....	21,846.04	6,085.01	6,877.56	51,838.10	31,145.11	24,066.92	10,271.77	6,027.52	25,149.39	19,769.76
Total operating expenses	277,707.62	28,598.23	50,314.64	555,729.06	459,283.53	183,845.97	82,745.48	53,594.62	137,633.35	211,477.40
Operating realization.....	429,834.68	63,613.15	44,370.43	1,204,593.77	658,710.49	355,947.31	108,587.29	80,262.74	1,268,449.37	368,239.98
Add: Other receipts.....	4,790.63	1,058.40	544.54	9,346.72	4,805.80	677.16	20.45	442.84	264,351.52	2,710.82
Deduct: Other expenses.....	-	965.42	1,558.67	1,000.00	-	5,985.23	4,717.30	829.52	263,566.77	1,882.02
Net realization.....	434,625.31	63,706.13	43,356.30	1,212,940.49	663,516.29	350,639.24	103,890.44	79,876.06	1,269,234.12	369,068.78
Distribution of net realization:										
Advance payments to patrons.....	363,125.52	59,967.85	39,403.32	982,411.20	567,272.99	272,178.62	82,827.87	67,169.18	1,231,655.97	304,294.57
Dividends on stock.....	4,594.00	-	-	-	-	5,053.93	-	-	-	1,205.99
Patronage refunds ^c	66,905.79	3,738.28	3,952.98	230,529.29	96,243.30	73,406.69	21,062.57	12,706.88	37,578.15	63,568.22
Total.....	434,625.31	63,706.13	43,356.30	1,212,940.49	663,516.29	350,639.24	103,890.44	79,876.06	1,269,234.12	369,068.78
Patronage refunds as proportion of gross realization.....	9.46	4.05	4.17	13.10	8.61	13.60	11.01	9.49	2.67	9.19

^aNumbers in this table refer to the same associations as the numbers in tables 7 to 9 and 11 to 13 in this report.

^bThe milk receiving cooperative.

^cIncludes all patronage refunds, whether made in cash, capital certificates or book credits.

Source: Based on annual audit reports of the cooperatives.



BASED ON ANNUAL AUDIT REPORTS OF THE COOPERATIVES

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FIGURE 10: APPROXIMATE DISTRIBUTION OF EACH DOLLAR RECEIVED FOR MILK MARKETING BY 8 MILK DISTRIBUTING COOPERATIVES IN GEORGIA, FISCAL YEARS ENDED BETWEEN JULY 1, 1946, AND JUNE 30, 1947

Other factors also are significant. As shown in table 11, association number 7 had relatively large savings per gallon of milk but that cooperative actually had rather large purchases of dairy products. However, association number 3 (table 11) also had relatively large purchases but does not appear to have been one of the most efficient. As a matter of fact, it is one of the youngest cooperatives in the group and has not yet had time to achieve the same level of efficiency as some of the older and larger cooperatives. Association number 1 (table 11) makes substantial purchases but has achieved a rather high level of efficiency.

The "Gross Realization" gives some indication of the quantitative importance of purchases of dairy products. All associations having gross realizations over one dollar per gallon had relatively large outside purchases.

Further details with respect to operating expenses are presented in table 12. "Processing Expense-Supplies" includes the cost of dairy products purchased from other organizations but not the value of milk received from individual producer-patrons. It also includes non-dairy food supplies such as sugar and chocolate flavoring, in addition to plant supplies for processing purposes. The "Processing Expense-Other" includes rent and freight expense.

The "Selling and Distributing Expense" includes sales at the plant, over counters, through dairy stores, and through wholesale and retail routes. "Salaries and Commissions" includes bonuses. The "Other" expense includes garage and store supplies, store utilities, rent, and insurance. The "Administrative and General Expense-Other" includes rent, taxes, and unallocated travel and entertainment expense.

All 9 Georgia cooperatives, both exempt and non-exempt, pay taxes of various kinds. The smallest cooperative, in terms of receipts from individual producers, has applied for exemption from payment of Federal income taxes but last year paid other taxes at the rate of over 1 cent per gallon.

Operating costs, on the basis of receipts from individual producers, are summarized in table 13. Processing costs per gallon were lowest for one of the small cooperatives but other small associations had high costs. Some distortion due to purchases of dairy products exists in table 13 as well as tables 8 and 11, however.

Two of the small cooperatives had the lowest per unit costs under "Selling and distribution Expense." "Administrative and General Expense," however, was relatively high for the several small associations.

The foregoing comments might be interpreted to mean that the cooperatives with the smallest volumes tend to be the most efficient. Such a conclusion would be unwarranted. Association number 2 has a small volume and had low unit costs (table 13) but also had low savings as a percentage

Table 11. - Comparative summaries of operating statements, per unit of volume handled, fiscal years ended between July 1, 1946 and June 30, 1947, of dairy cooperatives distributing milk in Georgia, April 1947

PARTICULARS	AMOUNTS PER GALLON OF MILK RECEIVED FROM INDIVIDUAL PRODUCERS ^a								SIMPLE AVERAGE FOR 8 DISTRIBUTING ASSOCIATIONS
	ASSOCIATION NUMBER ^b								
	1	2	3	4	5	6	7	8	
Gross realization.....	\$1.0774	\$0.6160	\$1.0755	\$0.7492	\$0.8972	\$0.7839	\$1.1446	\$0.7180	\$0.8827
Operating expenses:									
Processing.....	.2751	.0957	.3542	.1114	.1956	.1166	.3097	.2052	.2079
Selling.....	.1145	.0547	.1392	.1031	.1480	.1155	.1238	.0500	.1061
Administrative and general.	.0333	.0406	.0781	.0220	.0250	.0349	.0615	.0323	.0410
Total operating expenses.	.4229	.1910	.5715	.2365	.3686	.2670	.4950	.2875	.3550
Operating realization.....	.6545	.4250	.5040	.5127	.5286	.5169	.6496	.4305	.5277
Add: Other receipts.....	.0073	.0071	.0062	.0040	.0039	.0010	.0001	.0024	.0040
Deduct: Other expenses....	-	.0065	.0177	.0005	-	.0087	.0282	.0044	.0082
Net realization.....	.6618	.4256	.4925	.5162	.5325	.5092	.6215	.4285	.5235
Distribution of net realization:									
Advance payments to patrons	.5529	.4006	.4476	.4181	.4553	.3953	.4955	.3603	.4407
Dividends on stock.....	.0070	-	-	-	-	.0073	-	-	.0018
Patronage refunds ^c1019	.0250	.0449	.0981	.0772	.1066	.1260	.0682	.0810
Total.....	.6618	.4256	.4925	.5162	.5325	.5092	.6215	.4285	.5235

^a Figure does not include purchases of dairy products from proprietary or cooperative organizations; includes receipts from individuals of Grade A whole milk, Grade B whole milk, and milk equivalent of farm-separated cream.

^b Numbers in this table refer to the same associations as the numbers in tables 7 to 10 and 12 and 13 in this report.

^c Includes all patronage refunds, whether made in cash, capital certificates, or book credits.

Source: Based on annual audit reports of the cooperatives.

Table 12. - Comparative operating expenses, fiscal years ended between July 1, 1946 and June 30, 1947, of seven dairy cooperatives distributing milk in Georgia, April 1947

PARTICULARS	ASSOCIATION NUMBER ^a								AVERAGE FOR 7 DISTRIBUTING ASSOCIATIONS
	1	2	3	5	6	7	8		
<u>Processing expense</u>									
Labor.....	\$18,826.06	\$3,767.04	\$5,592.59	\$49,332.85	\$16,461.97	\$5,775.52	\$6,548.41	\$15,186.35	
Supplies.....	120,481.69	3,169.77	17,405.32	140,826.80	34,274.79	34,223.34	21,484.21	53,123.70	
Bottles.....	5,808.38	900.00	612.41	8,301.46	8,733.41	1,873.73	769.81	3,857.03	
Depreciation of buildings, machinery and equipment.....	6,804.14	3,358.28	3,228.02	11,619.78	4,426.84	3,009.29	3,472.60	5,131.28	
Repairs to buildings, machinery and equipment.....	9,594.37	189.32	1,072.57	8,344.91	2,824.02	1,750.70	818.05	3,513.42	
Fuel, light, power and water.....	9,925.01	1,934.52	1,729.57	12,640.15	4,703.30	3,152.42	3,126.58	5,315.94	
Insurance.....	4,756.70	386.82	399.40	1,492.61	2,100.81	661.11	178.50	1,425.14	
Taxes.....	2,104.00	413.19	538.12	8,282.21	2,708.87	1,329.36	679.59	2,293.62	
Laundry and supplies.....	1,877.86	133.46	363.63	-	1,702.31	-	1,172.27	749.93	
Other.....	508.48	71.03	237.01	2,845.95	2,335.37	-	-	856.83	
Total processing expense.....	180,686.69	14,323.43	31,178.64	243,686.72	80,271.69	51,775.47	38,250.02	91,453.24	
<u>Selling and distributing expense</u>									
Salaries and commissions.....	50,489.06	4,598.60	5,787.93	104,504.41	49,390.17	13,739.01	5,596.97	33,443.74	
Truck and wagon expense.....	11,784.76	2,388.81	2,150.33	7,690.28	16,128.95	3,470.91	2,104.46	6,531.21	
Depreciation.....	6,471.05	516.59	1,604.55	7,486.47	4,337.66	1,698.56	558.96	3,239.12	
Advertising.....	1,572.76	547.99	349.56	12,001.04	485.79	693.60	577.97	2,318.39	
Ice.....	3,252.18	-	-	478.54	2,718.68	369.20	-	974.08	
Taxes.....	1,605.08	122.30	158.90	3,285.97	2,012.93	506.65	298.72	1,141.51	
Other.....	-	15.50	2,207.17	49,004.99	4,433.18	220.31	180.00	8,008.74	
Total selling and distributing expense.....	75,174.89	8,189.79	12,258.44	184,451.70	79,507.36	20,698.24	9,317.08	55,656.79	
<u>Administrative and general expense.</u>									
Salaries and commissions.....	16,258.87	4,550.69	5,293.59	21,389.74	18,899.59	7,505.01	3,753.80	11,093.04	
Directors' fees and expenses.....	600.00	-	-	571.00	-	-	-	167.29	
Manager's expenses.....	282.11	25.80	-	50.55	-	-	26.50	54.99	
Auditing and legal service.....	622.20	150.00	437.69	3,493.46	1,335.62	355.00	895.00	1,341.28	
Bank service charges.....	-	44.37	-	28.39	-	18.39	4.00	13.59	
Depreciation of office furniture and fixtures.....	181.10	44.73	10.39	216.41	170.46	84.41	49.56	108.15	
Donations.....	848.00	-	10.00	-	-	117.21	71.00	149.46	
Dues and subscriptions.....	613.60	-	-	93.92	-	5.00	34.00	106.65	
Insurance and bonds.....	-	127.55	111.49	763.53	-	147.80	211.86	194.61	
Maintenance and repairs - office equipment.....	-	13.35	-	50.00	54.40	-	-	16.82	
Office supplies and postage.....	1,361.97	717.33	359.55	582.13	2,172.60	1,301.63	321.55	973.82	
Telephone and telegraph.....	750.94	251.51	307.47	797.26	319.03	272.97	185.09	412.04	
Other.....	327.25	159.68	347.38	3,108.72	1,115.22	464.35	475.16	856.82	
Total administrative and general expense.....	21,846.04	6,085.01	6,877.56	31,145.11	24,066.92	10,271.77	6,027.52	15,188.56	

^aNumbers in this table refer to the same associations as the numbers in tables 7 to 11 and 13 in this report. Data were not available for association number 4.

Source: Based on annual audit reports of the cooperatives.

Table 13. - Comparative operating expenses, per unit of volume handled, fiscal years ended between July 1, 1946, and June 30, 1947 of dairy cooperatives distributing milk in Georgia, April 1947

PARTICULARS	EXPENSES PER GALLON OF MILK RECEIVED FROM INDIVIDUAL PRODUCERS ^a								SIMPLE AVERAGE FOR 7 DISTRIBUTING ASSOCIATIONS
	ASSOCIATION NUMBER ^b								
	1	2	3	5	6	7	8		
Cents									
Processing expense									
Labor.....	2.87	2.52	6.35	3.96	2.39	3.45	3.51	3.58	
Supplies.....	18.34	2.12	19.77	11.30	4.98	20.47	11.52	12.64	
Bottles.....	0.88	0.60	0.70	0.67	1.27	1.12	0.41	0.80	
Depreciation of buildings, machinery and equipment.....	1.04	2.24	3.67	0.93	0.64	1.80	1.86	1.74	
Repairs to buildings, machinery and equipment.....	1.46	0.13	1.22	0.67	0.41	1.05	0.44	0.77	
Fuel, light, power and water.....	1.51	1.29	1.97	1.01	0.68	1.89	1.68	1.43	
Insurance.....	0.72	0.26	0.45	0.12	0.31	0.40	0.10	0.34	
Taxes.....	0.32	0.28	0.61	0.67	0.39	0.79	0.37	0.49	
Laundry and supplies.....	0.29	0.09	0.41	-	0.25	-	0.63	0.24	
Other.....	0.08	0.04	0.27	0.23	0.34	-	-	0.14	
Total processing expense.....	27.51	9.57	35.42	19.56	11.66	30.97	20.52	22.17	
Selling and distributing expense									
Salaries and commissions.....	7.69	3.07	6.57	8.39	7.17	8.22	3.00	6.30	
Truck and wagon expense.....	1.79	1.59	2.44	0.62	2.34	2.08	1.13	1.71	
Depreciation.....	0.99	0.35	1.82	0.60	0.63	1.02	0.30	0.81	
Advertising.....	0.24	0.37	0.40	0.96	0.07	0.41	0.31	0.39	
Ice.....	0.50	-	-	0.04	0.40	0.22	-	0.17	
Taxes.....	0.24	0.08	0.18	0.26	0.29	0.30	0.16	0.22	
Other.....	-	0.01	2.51	3.93	0.64	0.13	0.10	1.05	
Total selling and distributing expense.....	11.45	5.47	13.92	14.80	11.54	12.38	5.00	10.65	
Administrative and general expense									
Salaries and commissions.....	2.48	3.04	6.01	1.72	2.74	4.49	2.01	3.21	
Directors' fees and expenses.....	0.09	-	-	0.05	-	-	-	0.02	
Manager's expenses.....	0.04	0.02	-	(c)	-	-	0.01	0.01	
Auditing and legal service.....	0.09	0.10	0.50	0.28	0.19	0.21	0.48	0.26	
Bank service charges.....	-	0.03	-	-	-	0.01	(c)	0.01	
Depreciation of office furniture and fixtures.....	0.03	0.03	0.01	0.02	0.02	0.05	0.03	0.03	
Donations.....	0.13	-	0.01	-	-	0.07	0.04	0.04	
Dues and subscriptions.....	0.09	-	-	0.01	-	(c)	0.02	0.02	
Insurance and bonds.....	-	0.08	0.13	0.06	-	0.09	0.11	0.07	
Maintenance and repairs -office equipment.....	-	0.01	-	(c)	0.01	-	-	(c)	
Office supplies and postage.....	0.21	0.48	0.41	0.05	0.32	0.78	0.17	0.35	
Telephone and telegraph.....	0.12	0.17	0.35	0.06	0.05	0.16	0.10	0.14	
Other.....	0.05	0.11	0.39	0.25	0.16	0.28	0.26	0.21	
Total administrative and general expense.....	3.33	4.07	7.81	2.50	3.49	6.14	3.23	4.37	

^aFigure does not include purchases of dairy products from proprietary or cooperative organizations; includes receipts from individuals of Grade A whole milk, Grade B whole milk, and milk equivalent of farm-separated cream.

^bNumbers in this table refer to the same associations as numbers in tables 7 to 12 in this report. Data were not available for association number 4.

^cLess than .01 cents per gallon.

Source: Based on annual audit reports of the cooperatives.

of total gross realization (table 10). The larger cooperatives have more complex competitive conditions and methods of distribution, and generally operate in larger cities with higher labor and real estate costs.

Although there is some indication that the older and larger cooperatives have been able to achieve the greatest savings per gallon of milk handled, the series of financial tables do not offer conclusive evidence of a definite operating advantage. The number of associations is too few and the conditions under which they operate are too varied. However, the tables do offer standards by which similar cooperatives, either now active or proposed, can measure the efficiency of their own businesses or estimate costs of anticipated operations.

RELATIONS WITH PRODUCER-PATRONS

Only one dairy cooperative in Georgia restricts its business to member-producers but in no association does the nonmember business represent as much as half the total business. Among the eight cooperatives permitting nonmember business, that done with members ranges in proportion to the total business from 60 percent to almost 100 percent. For two associations it is slightly over 60 percent, for five others it is from 80 to 90 percent, and for one association it is almost 100 percent. For the entire group of 9 cooperatives, about 83 percent of the business with individual producer-patrons is with members.

The number of producers patronizing these cooperatives is summarized in table 14. To only a limited extent are the numbers indicative of total volume of business and proportion with members and nonmembers.

Table 14. - Number of member and nonmember patrons of dairy cooperatives operating plants in Georgia, April 1947

ASSOCIATION NUMBER ^a	MEMBERS	NONMEMBERS	TOTAL PRODUCER- PATRONS
1.....	230	69	299
2.....	92	0	92
3.....	14	45	59
4.....	41	7	48
5.....	18	29	47
6.....	35	6	41
7.....	6	5	11
8.....	7	1	8
9.....	5	3	8
Total.....	448	165	613

^aNumbers in this table do not refer to the same associations as do the numbers in other tables in this report.

Source: Based on records of the cooperatives.

No dairy cooperative in Georgia has patronage as the only requirement for membership. In all, the approval of the board of directors and the fulfilling of conditions specified by the board are required. All but one of the cooperatives require an applicant for membership to sign a marketing agreement. Two cooperatives also require all nonmembers to sign marketing agreements.

At the time the field survey for this study was conducted, two cooperatives were not accepting additional producer-patrons. Another association accepted the patronage of additional producers as nonmembers but did not permit them to become members.

Most of the usual methods of maintaining contact with producer-patrons are not used by these dairy cooperatives. Direct personal contacts between management and producers occur regularly among the smaller associations but are less frequent among the larger ones.

For most of the members of the cooperatives, the annual meeting seems to have become a necessary chore rather than an occasion to anticipate. Well planned meetings can contribute a great deal to the education and interest of producers and also to the stability of the organization.¹¹

None of the cooperatives has a periodical newsletter or other publication for patrons. Several have issued circular letters at infrequent and irregular intervals. Regular contacts with patrons are needed to let them know what their cooperative is doing and also to help them understand its possibilities and limitations. A well informed membership tends to become a loyal membership.

Educational programs directed toward young people on farms are major activities of a number of dairy cooperatives in other States but no Georgia association has such a program. The young people of today are the prospective members of tomorrow. A forward-looking management should prepare them to perform their duties capably and to appreciate the value of the cooperative they may eventually join.

In addition to marketing patrons' milk, all the cooperatives engage in some activities of a service nature. Included are such diverse operations as purchasing feed, handling farm production supplies, and providing representation at industry and cooperative meetings.

Five of the cooperatives handle feed purchases. Four receive feed from a cooperative at Atlanta and the fifth buys from a proprietary concern.¹²

¹¹See Hyre, French M. Making the most of your co-op annual meeting. F.C.A. Misc. Report 92. 28 pp. 1945.

¹²The fifth association transferred its business to the Atlanta cooperative shortly after the field survey for this report was completed.

In four instances the association acts as a purchasing agent only and producers desiring feed obtain it at cost direct from the railroad cars in which it was shipped. The cooperative at Eatonton operates a feed warehouse.

Four cooperatives handle relatively small quantities of farm production supplies. The business is performed at cost and thus no savings have been available for allocation.

During recent years, interest in group hospitalization and group life insurance plans for members has increased considerably in many areas. In Georgia, two dairy cooperatives have adopted a group plan and two more are considering similar plans.

MANAGEMENT

In the broadest sense of the word, management of a cooperative means all those who collectively control the business. This includes the entire membership and all supervisory employees but generally, however, it is interpreted to include only the board of directors and the supervisory employees.

Each of five dairy cooperatives in Georgia has a board of directors consisting of five members. One association has six members, one has seven, one has nine, and one has 18 members on its board of directors.

All managers of the cooperatives are employed on a full-time basis. With but one exception, they are paid fixed salaries and no commissions. The general income level of the group compares favorably with that of employees of comparable associations in other areas, insofar as limited information on other areas permits comparisons.

In April 1947, the managers then employed had served their respective cooperatives from 2 months to 11 years, or an average of about 3 years. This compared with a range in age of associations of from 1 to 17 years and an average of slightly over 7 years.

Education and experience of the managers is varied. Three had no previous experience or training in the dairy industry or with cooperatives, two were promoted from subordinate positions within the association, two had been employed in dairy plants operated by proprietary organizations, and one had been a salesman for a dairy equipment concern.

Little attention is given by the cooperatives to training persons to assume the responsibilities of management when the present managers leave. It appears that some comprehensive long-range program is needed to acquire and retain competent administrative employees.

EMPLOYEE RELATIONS

None of the cooperatives has employees hauling milk from farms to its plant. The number and classification of those working for the distributing cooperatives is presented in table 15. The single milk receiving association had only 18 employees, despite the large volume of milk handled, because of the relative simplicity of its plant operations and distribution.

Table 15. - Number of employees, according to work performed, of milk distributing cooperatives operating plants in Georgia, April 1947

WORK PERFORMED	ASSOCIATION ^a								TOTAL
	1	2	3	4	5	6	7	8	
Production.....	51	30	10	11	4	3	2	2	113
Distribution.....	80	103	31	34	7	10	6	3	274
Administration.....	5	4	4	2	2	2	2	2	23
Clerical.....	9	3	6	3	1	3	1	2	28
Total.....	145	140	51	50	14	18	11	9	438

^aNumbers indicate relative size of associations in terms of daily average receipts of milk from individual producers. Number 1 is the largest association and others are numbered accordingly.

Source: Based on reports from the cooperatives.

The number of employees tends to increase as the volume of milk received increases. Differences in operations also are a factor. Cooperatives operating stores and dairy bars have relatively more distribution employees for the volume of milk handled than do cooperatives selling only through wholesale and retail routes.

Although association number 6 (table 15) receives less milk from producers than does association number 5, its average daily sales are about 70 per cent larger. This reflects higher wholesale and retail prices per unit of product and also proportionately larger purchases of dairy products from suppliers other than individual producers. Therefore, the numbers of employees required are even more closely related to volume than indicated by table 15.

Bases for paying milk-route drivers vary considerably among the cooperatives. Of the seven cooperatives having both wholesale and retail routes, three associations pay on a straight salary basis, three pay commission only, and one pays on the basis of salary plus commission. Three out of the four largest, in terms of dollar volume of business, use

the commission-only system. One of those paying its milk route drivers on a straight salary basis pays a specialized ice cream route driver a salary plus commission. Two of the three cooperatives using the commission-only basis guarantee drivers a definite minimum amount of money for each pay period.

Four of the nine dairy cooperatives have plans for annual bonuses to employees. All are distributing cooperatives and include four out of the five largest associations, in terms of dollar volumes of business, of that type. Bonuses under two of the plans are based on the individual's length of service and amount of pay. Bonuses paid to employees by another cooperative bear no relation to length of service or pay but are determined solely by the type of work performed. For example, all route drivers get the same amount. For the fourth cooperative using a bonus plan, length of service is the sole factor determining the amounts paid to individuals.

None of the cooperatives use a share-the-savings plan to determine the total amount available for payment to employees in the form of bonuses. The boards of directors determine annually the amounts and methods of payment on the basis of current and anticipated business conditions.

The movie is an effective medium for education of both employees and members. Only one of the dairy cooperatives in Georgia owns movie equipment.¹³

Five of the nine dairy cooperatives have obtained group life or hospitalization insurance for employees. In March 1947, a sixth cooperative was considering a plan of that nature. The remaining three cooperatives are among the youngest of the group and may eventually adopt group insurance plans.

Very little is done by any of the associations with respect to organized recreation for employees. Several have infrequent picnics, barbecues, or dinners but only one has a team of employees competing with similar groups from other organizations.

RELATIONS WITH OTHER COOPERATIVES

Most of the cooperatives have bought or sold quantities of dairy products produced by other Georgia associations. None of them has a continuing, year-round agreement, however. A sale occurs when one cooperative has surplus milk and another can use it in some form that will net it a higher return than the first cooperative could realize. The Georgia associations also have purchased dairy products from cooperatives that maintain their principal places of business outside of Georgia. Land O'Lakes Creameries, Inc., of Minneapolis, maintains a branch office in Atlanta to receive and distribute dairy and poultry products. Other out-of-State cooperatives sell through local brokers in Georgia.

¹³A series of 3 films entitled "Small Milk Plant Operation" is distributed on a loan basis or at low cost by the U. S. Public Health Service. Other educational films are available from other sources.



Modern tank trucks are used to transport milk from the Eatonton Cooperative to other dairy plants.

No association is a member of another dairy cooperative nor does any association have a cooperative of any kind as a member.

Five of the dairy cooperatives are farm supply patrons of The Cotton Producers Association at Atlanta. The dairy cooperatives receive feed in carload lots and make advance payments to the Cotton Producers. At the end of the year, the farmers' purchasing association credits the dairy cooperatives with their proportionate shares, as determined on a patronage basis, of the savings from its feed operations.

One other dairy cooperative maintains close relationships with a local feed cooperative. The latter handles other dairy farm production supplies and also some plant supplies used by the dairy cooperative.

The Georgia Cooperative Council is an organization of farmers' marketing, purchasing, and service cooperatives. It provides associate memberships for general farm organizations, and public agencies interested in farmers' cooperative activities. It is primarily an educational organization but is also interested in legislation helpful to cooperatives generally. Six of the nine dairy cooperatives are members.

Two of the largest dairy cooperatives in Georgia are members of the National Cooperative Milk Producers' Federation. The Federation is an organization to promote the interests of dairy cooperatives at the national level. It functions primarily as an agency in representing the interests of dairy cooperatives and their members before the legislative

and administrative branches of the Government, and as an educational institution in informing its members in matters of public policy. It makes appraisals for its members of legislation, market conditions, and economic and other factors that affect the organization and operation of dairy cooperatives.

FUTURE OF THE COOPERATIVES

Dairymen in Georgia do not have great cause to fear financial failure of their modern cooperatives. Past experience indicates, however, the need for teaching members the principles, practices, and benefits of cooperation, if successfully operating cooperatives are not to become proprietary firms. If membership education programs are effective, cooperatives are likely to increase in number, membership, and volume of milk handled.

The primary function of dairy cooperatives in Georgia shifted first from manufacture of butter and cheese to price bargaining and then to distribution of market milk. No further change is anticipated in the immediate future but it is quite possible that within a relatively short time several cooperatives will receive and process substantial quantities of manufacturing milk.

OPPORTUNITIES FOR NEW COOPERATIVES

Seven dairy cooperatives that were active during April 1947 but not yet operating plants are listed in table 1. All were organized to pasteurize and bottle milk for local markets. The associations expected to begin operations with receipts from producers averaging from about 500 to 1500 gallons of milk a day. The plants will be capable of handling from about 1000 to 3000 gallons a day, however. All or most of the cooperatives planned to secure sufficient capital from three sources - producer-patrons, local business interests, and the Columbia Bank for Cooperatives.¹⁴

The experience of existing associations has conclusively demonstrated the ability of cooperating farmers to supply milk to consumers in competition with other distributors and, at the same time, effect substantial savings. Opportunities exist for new cooperatives in the State to supply milk to consuming centers.

In Georgia there are 13 cities which in 1940¹⁵ had populations in excess of 10,000 persons that are not now served by milk distributing cooperatives. It seems likely that one or more of those cities might support an efficient distributing association. On the basis of milk production (fig. 2) and the present location of cooperatives (fig. 1), it would appear that the greatest opportunities for additional cooperatives would be in cities in northern Georgia, particularly in the northeastern section.

¹⁴Most of the information on which this paragraph is based was obtained from C. G. Garner, Extension Economist, Georgia Extension Service.

¹⁵Published reports of the Bureau of the Census, U. S. Department of Commerce.

Operating in markets under regulation by the Georgia Milk Control Board means fixed margins. Cooperatives in those markets would not have to worry about price competition and should be able to compete with other organizations on a quality and service basis. In markets where prices were not regulated, the cooperatives might be able to increase consumption by economically sound reductions in prices.

The general public is becoming increasingly conscious of the merits of pasteurized milk. This, together with producer-distributors recognizing possible economies from merging their businesses into a cooperative, has been a factor in the development of several dairy associations in Georgia. It is likely to continue to play a role in the organization of additional milk distributing cooperatives.

In addition to the milk marketing associations, there may be opportunities for one or more dairy breeding cooperatives. In 1946, milk production per cow was about 50 percent greater in the United States as a whole than in Georgia.¹⁶ Other factors also may be important but it appears obvious that a need exists for better dairy cows. The dairy breeding cooperative, by using the technique of artificial insemination, could be an effective tool for improving the quality of dairy herds and could thereby increase the efficiency of milk production in Georgia.

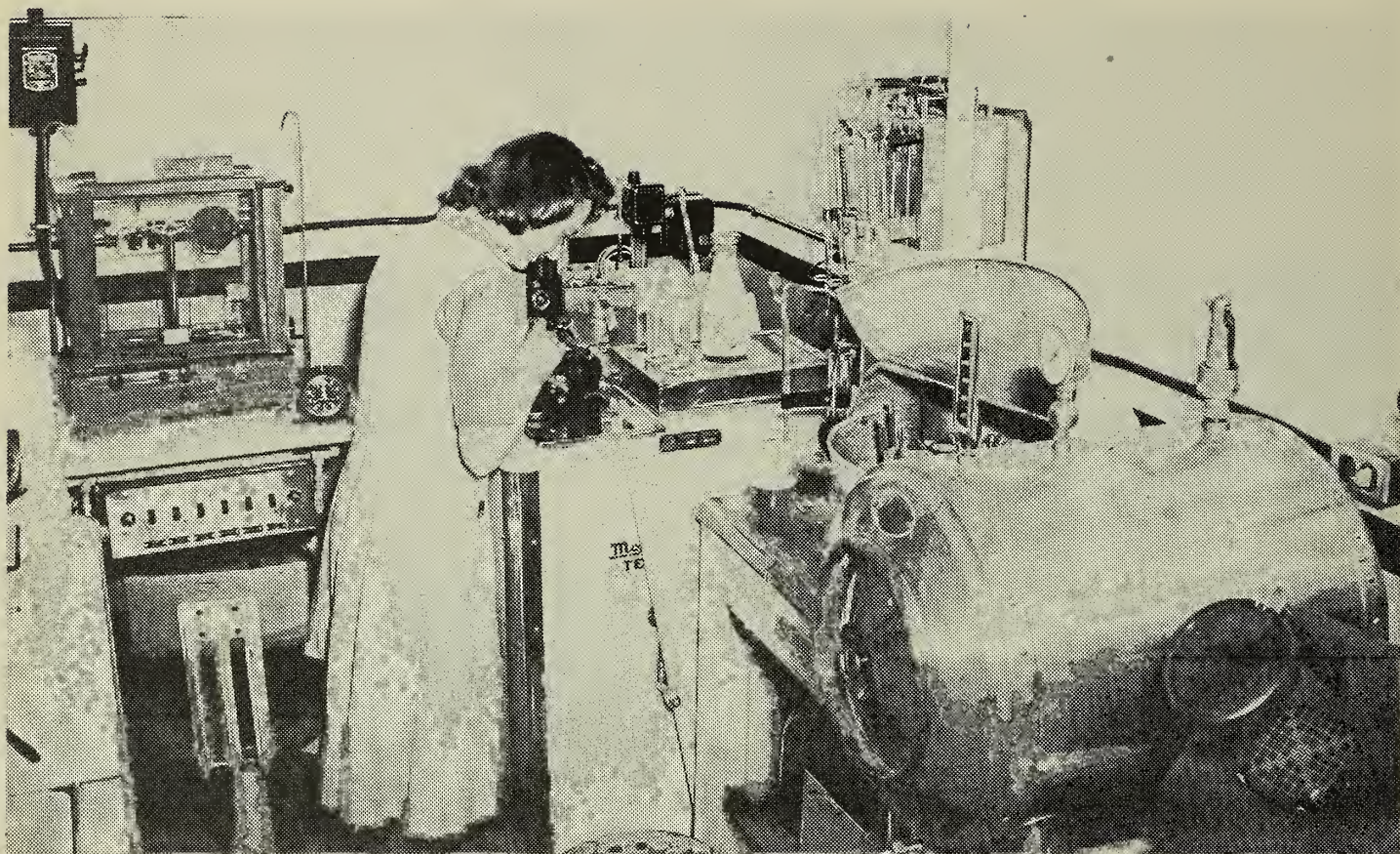
COOPERATION AMONG COOPERATIVES

Opportunities exist for mutually beneficial business relations among dairy cooperatives in Georgia. Insofar as their milk procurement or sales areas overlap there must necessarily be competition among them for both raw product and sales outlets. However, they have many objectives and programs that are not purely competitive in nature and much may be done in developing these by cooperation among the cooperatives.

Some of the problems of mutual concern that are not associated with conflicting interests and that might be met by concerted action are: (1) milk quality improvement on farms, (2) product quality control in plants, (3) pooling of supply purchases to obtain quantity discounts, (4) disposition of seasonal surpluses of milk, (5) development of adequate accounts and records, (6) employee training, and (7) membership education.

It is possible that more and better farm production supplies, particularly those not related solely to dairying, might be obtained through farmers' purchasing cooperatives. Furthermore, farmers who are conscientious members of one type of cooperative can become valued members of another. Associations of all types might well give attention to possible advantages of closer relationships with other cooperatives.

¹⁶Farm production, disposition and income from milk, 1945-46. U.S.D.A., Bur. Agr. Econ., 8 pp., 1947 (Processed). See table 7, p. 6.



This compact laboratory of the Georgia Milk Producers' Confederation reflects the increased emphasis on quality of product that will be so important to dairy cooperatives in the years ahead.

ANTICIPATED PROBLEMS

Sooner or later Georgia dairy cooperatives may be confronted by declining consumer incomes and resulting lower returns per unit of product handled. Prices in markets regulated by the Georgia Milk Control Board will not be subject to change by individual distributors but in other markets managements of cooperatives will have to determine at what price levels they can realize greatest net savings for producer-patrons.

When the level of advance payments to producers falls, membership ties are apt to be strained. It is important, therefore, that such ties now be made as strong as possible. This does not imply legal bonds but, instead, recognition on the part of members of their joint economic interests. Such an awareness may be achieved through educational activities of several types. Periodic publications and carefully planned meetings may be especially significant. Both present and prospective members need to know the value and limitations of their cooperative and should be kept informed and interested.

Competition with dairy products produced in other States is likely to continue to increase in the years ahead.

Financial structures and methods of financing will need to be economically sound to meet changing conditions. Capital needs may be large in

order to provide the cooperatives with efficient processing and distributing facilities.

Some of the smaller cooperatives are particularly interested in increasing their volumes of milk handled in order to achieve greater efficiency of operation. Some may produce a greater variety of products in order to meet local competition.

Wartime conditions increased the seasonal variation in quantities of milk leaving farms in many areas throughout the Nation. Some progress in reducing this variation is anticipated in Georgia as a result of educational and price incentive programs. Development of dairy breeding cooperatives may eventually contribute to that progress. Furthermore, methods of more efficiently using seasonal surpluses are likely to be devised.

Other problems will present themselves. The cooperatives will need to find ways and means to:

- (1) Provide producers with sufficient incentive to ship milk of uniformly high sanitary quality.
- (2) Retain competent employees, establish training programs for replacements, and develop sound personnel policies.
- (3) Keep abreast of technical developments in the industry.
- (4) Revise organization forms and structures when necessary to bring them up-to-date.
- (5) Investigate possibilities for savings in milk procurement through association supervision or control.
- (6) Meet increased competition from proprietary concerns operating in the same market.
- (7) Secure dependable sales outlets.
- (8) Distribute operating savings on a fair basis and retain reasonable amounts of capital in the business.
- (9) Develop and maintain adequate systems of accounts and records.
- (10) Guard against a tendency to drift into a closed, proprietary organization.

